

BADGER STATE

SMOKE SIGNALS

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Volume 34 No. 6 • Published Bimonthly

DECEMBER 2003

NATIONAL WEATHER SERVICE
TO PRESENT PUBLIC SERVICE AWARDS

Representatives from the Milwaukee-Sullivan and Green Bay National Weather Service (NWS) Offices will present **Public Service Awards** to several individuals and one organization in recognition of superb, long-term volunteer contributions to the NWS mission of saving lives and preventing property damage.

On December 4, 2003, an award ceremony for Thomas A. Fleming (N9SZF) and George E. Hrabovsky will be held in Madison, WI. Dane County and Wisconsin Emergency Management representatives will also be in attendance.

Mr. Thomas A. Fleming is recognized for his outstanding contribution to the WFO Milwaukee amateur radio program. Mr. Fleming was instrumental in the development and implementation of a major reorganization of the amateur radio communications structure between clubs and WFO Milwaukee, including development of the "Sullivan Committee" to oversee the project. Mr. Fleming's outstanding efforts contributed directly to successful completion of the NWS mission of saving lives and preventing property damage.

Mr. George E. Hrabovsky is recognized for his outstanding contribution to the WFO Milwaukee severe weather warning program. Mr. Hrabovsky organized and operated a Dane County mobile spotter group, conducted advance spotter classes for Dane County residents on behalf of the NWS and developed a web based spotter training course (<http://www.madscitech.org/tsn/training/btraining/btraining.html>). Mr. Hrabovsky's outstanding efforts contributed directly to successful com-

pletion of the NWS mission of saving lives and preventing property damage.

On December 5, 2003, an award ceremony for Christian J. Reynolds (KC0ARF) will be held at the Green Bay NWS Office, 2485 South Point Rd. Mr. Reynolds transferred from the Milwaukee area to Green Bay in December, 2002.

Mr. Reynolds is recognized for his outstanding contribution to the WFO Milwaukee amateur radio program. Mr. Reynold's employed his amateur radio and computer expertise in development and maintenance of the Sullivan Committee's web site (<http://www.sulcom.org/>) for use by all amateur radio operators, NWS meteorologists and other severe weather spotters. Mr. Reynold's outstanding efforts contributed directly to successful completion of the NWS mission of saving lives and preventing property damage.

On Dec 11, 2003, an award ceremony for Thomas J. Kurcharski, John L. Leekley (WB9SMM) , Jr., David L. Barquist (K9PAK), and Skip Voros (WD9HAS) and Rick Swierczynski (N9TPY) of Milwaukee Area Skywarn Association (MASA), Inc., will be conducted at the Emergency Operations Center, Milwaukee, WI. Representatives from the Milwaukee County Emergency Management team will be present.

Mr. Thomas J. Kucharski is recognized for his outstanding contribution to the WFO Milwaukee amateur radio program. Mr. Kurcharski's leadership in refinement of ham communications at WFO Milwaukee was instrumental in initiation of the yearly net controller/

SKYWARN RECOGNITION DAY 2003

According to Scott Mentzer-N0QE, the Meteorologist-in-Charge at the Goodland, Kansas, National Weather Service (NWS) office, and working in conjunction with the ARRL, Skywarn Recognition Day (SRD) has been set for Friday Night December 5th and Saturday December 6th, 2003. It is Scott and their weather office that has setup the Recognition Day over the past several years.

The event really starts Friday Night December 5th at 7 PM through Saturday December 6th, 2003 at 7 PM, but using Coordinated Universal Time (otherwise known as UTC or Zulu time) the event is Saturday December 6th from 0000-2400 UTC.

There are currently 50 NWS offices registered to participate in the event (in Wisconsin this now includes the La Crosse and Milwaukee NWS offices). Nationwide information on the participating NWS offices, schedules, frequencies, and modes, has been posted on the official SRD web site. See below link.

Dave Floyd (from the NWS Goodland,

Kansas) and Steve Ewald (ARRL) have an article about SRD on page 90 of the November QST Magazine.

Like last year, the SRD certificate is being developed by Bruce Frahm, K0BJ. The certificate this year will highlight two big weather events from 2003: Hurricane Isabel and the record breaking tornado outbreak that affected much of central plains and Mississippi River valley May 4-10, 2003.

SKYWARN Recognition Day is not a contest, but a way for the National Weather Service to thank all Amateur Radio Operators for their hard work during the severe weather season. It also gives the chance for NWS forecast offices to contact each other and for Amateurs to contact various NWS forecast offices across the country. For information on last year's results and updates on the 2003 event, see the following website: <http://hamradio.noaa.gov/>.

By Skip Voros - WD9HAS
Milwaukee Area Skywarn Assoc.

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Check us out on the web at
[Http://www.bsas.org](http://www.bsas.org)



WHAT’S HAPPENING

Swapfests and Other Social Events — Club Meetings Amateur Radio Exam Schedules

Edited by Kenneth A. Ebnetter, K9EN, 822 Wauona Trail, Portage WI 53901 — kenneth.ebnetter@verizon.net

Swapfests And Other Social Events

January 3, 2004, Waukesha, WI
32nd Annual Midwinter Swapfest, sponsored by the West Allis RAC. Waukesha County Expo Center Forum, Waukesha, WI. For information contact: www.warac.org, WARAC Swapfest, PO Box 1072, Milwaukee, WI 53201, or Phil, W9NAW, (414) 425-3649

January 25, 2004, St. Charles, IL.
Wheaton Community Radio amateurs. <http://www.wheatonhamfest.org>. Contact: Bruce Plantz, K9OZ, 4712 Devon Ave., Lisle, IL 60532. Telephone (530) 968-1844. e-mail: info@wheatonhamfest.org

March 14, 2004, Wisconsin QSO Party.
Sponsored by the West Allis Radio Amateurs Club. For information contact: WARAC, PO Box 1072, Milwaukee, WI 53201-1072 or www.warac.org

March 21, 2004, Jefferson, WI
Tri-County Amateur Radio Club, Jefferson County Fairgrounds, Activity Center, Hwy 18 West, Jefferson, WI. For information contact: TCARC, 213 Frederick St., Fort Atkinson, WI 53538, www.cmdline.con/tcarc/.

jsatt@ticon.net or (920) 563-6381 (evenings), (200 563-9551 (fax)

March 28, 2004, Grays Lake, IL. North Shore Radio Club, NS9RCfest.

April 18, 2004. Madison Area Repeater Association Swapfest, Stoughton, WI.

May 01, 2004, Cedarburg, WI. 26th Annual Amateur Radio and Computer Swapfest, Ozaukee Radio Club (ORC). Info: www.gsl.net/orc/swap.html.

July 10, 2004. South Milwaukee Swapfest '04. 9327 South Shepard Ave., Oak Creek, WI. Contact: (414) 762-3235. e-mail: ryatex@aol.com

August 14, 2004 Circus City Swapfest, Baraboo, WI.

September 11, 2004. Eau Claire ARC Swapfest, Eau Claire, WI

September 17-18-19, 2004. Peoria Superfest, Exposition Gardens Fairgrounds, 1601 W Northmoor Rd, off N. University, Peoria, IL. Contact: Peoria Superfest, PO Box 3508 Peoria, IL 61612-3508. (309) 692-2378. e-mail: w9uvi@arrl.net. <http://www.peoriasuperfest.com>.



We are unable to include the full listing of club meetings in The Wisconsin area in every printed edition of BSSS. Please see the last issue of BSSS for the full listing of club meetings in the area. If there are any changes or corrections please let Ken K9EN know. See the addresses below.

The Test Point



Amateur Radio Examination Locations and Schedules in the Area

December 06, 2003	Fond du Lac, WI
December 06, 2003	Madison, WI
December 06, 2003	Racine, WI
December 06, 2003	St. Paul, MN

December 11, 2003	Apple Valley, MN
December 13, 2003	Blaine, MN
December 13, 2003	Oshkosh (Omro), WI
December 18, 2003	Eden Prairie, MN
December 20, 2003	Mauston, WI
December 20, 2003	Milwaukee, WI (BE)
December 20, 2003	Loves Park, IL
December 20, 2003	Cottage Grove, MN
December 27, 2003	Bloomington, MN
January 03, 2004	Waukesha, WI (MRAC)
January 03, 2004	Madison, WI
January 03, 2004	St. Paul, MN
January 08, 2004	Apple Valley, MN
January 10, 2004	Blaine, MN
January 10, 2004	Oshkosh (Omro), WI
January 17, 2004	Milwaukee, WI (BE)
January 17, 2004	Loves Park, IL
January 17, 2004	Cottage Grove, MN
January 20, 2004	Eden Prairie, MN
January 24, 2004	Bloomington, MN
January 31, 2004	Milwaukee, WI (MRAC)
January 31, 2004	Tomahawk, WI
February 07, 2004	Madison, WI
February 07, 2004	Racine, WI
February 07, 2004	St. Paul, MN
February 12, 2004	Apple Valley, MN
February 14, 2004	Blaine, MN
February 14, 2004	Oshkosh (Omro), WI
February 17, 2004	Eden Prairie, MN
February 21, 2004	Milwaukee, WI (BE)
February 21, 2004	Loves Park, IL
February 21, 2004	Cottage Grove, MN
February 28, 2004	Bloomington, MN
February 28, 2004	Milwaukee, WI (MRAC)
February 28, 2004	Tomahawk, WI
March 06, 2004	Madison, WI
March 06, 2004	Racine, WI
March 06, 2004	St. Paul, MN
March 11, 2004	Apple Valley, MN
March 13, 2004	Blaine, MN
March 13, 2004	Oshkosh (Omro), WI
March 16, 2004	Eden Prairie, MN
March 20, 2004	Milwaukee, WI (BE)
March 20, 2004	Loves Park, IL
March 20, 2004	Menomonie, WI
March 20, 2004	Cottage Grove, MN
March 27, 2004	Bloomington, MN
March 27, 2004	Tomahawk, WI
April 03, 2004	Milwaukee, WI (MRAC)
November 06, 2004	Menomonie, WI
Monthly, 1st Sat.	Madison, WI
Monthly, 1st Sat.	Racine, WI
(except Jan., Jul., & Aug.)	
Monthly, 1st Sat.	St. Paul, MN
Monthly, 2nd Thu.	Apple Valley, MN
Monthly, 2nd Sat.	Blaine, MN
Monthly, 2nd Sat.	Oshkosh (Omro), WI
Monthly, 3rd Tue.	Eden Prairie, MN
Monthly, 3rd Sat.	Milwaukee, WI (BE)
(September through April)	
Monthly, 3rd Sat.	Loves Park, IL
Monthly, 3rd Sat.	Cottage Grove, MN
Monthly, 4th Sat.	Bloomington, MN
	(Continued on page 3)

Badger State Smoke Signals

Amateur Radio Education and Information

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EDITORIAL BOARD: Ken Ebnetter, K9EN; Don Evenson, K9JYX.

Subscription Rate

1 year (6 issues—bi-monthly)\$13.95

A subscription form is in this issue. Special club package reduced rates are available. For information, contact Ken Ebnetter, K9EN.

When to Send It

The closing date for each issue is the first of the month before the issue date. For example, the closing date for the May issue is April 1. The only exception is for participating clubs' minutes. Participating clubs are requested to send their material no later than FIVE DAYS after the club's meeting. For example, if a club meets on the 4th of the month, the material should be sent no later than the 9th of that month. This material is to be sent to the Editor.

Where to Send It

Address changes and corrections, and exchange papers should be sent to Ken Ebnetter.

Editorial material, photographs, and feature articles should be sent to Ken Ebnetter, K9EN.

Web page material should be sent to n9qa@arrl.net (Dave Knaus, N9QA).

Inquiries about advertising should be directed to Ken Ebnetter.

Club, swapfest, and Test Point information should be sent to Ken Ebnetter.

Swapfest ADS should be sent to Ken Ebnetter, K9EN no later than eight weeks before the

events date.

Subscriptions should be sent, with check or money order, to Ken Ebnetter.

Conditions for Reprinting or BBS Posting Material from Badger State Smoke Signals

Permission is hereby granted to reprint articles or posting articles on radio or telephone bulletin boards from *Badger State Smoke Signals*, providing credit is given to the original author, publication in which the article first appeared, and to *Badger State Smoke Signals*.

This newspaper is produced by volunteer radio amateurs, and is non-profit. This newspaper is mailed from Portage, WI 53901.

Badger State Smoke Signals is incorporated as a Wisconsin non-stock, non-for-profit organization.

Editorial Disclaimer

The opinions expressed in editorials, guest editorials, columns, articles, and letters from readers are the opinions of the authors only, and do not, unless otherwise stated, express or imply endorsement by *Badger State Smoke Signals*, or by any other individual or organization.

(Continued from page 2)

THE TEST POINT

Monthly, Last Sat. Milwaukee, WI (MRAC)
(except Mar., Jun., Aug., & Dec.)
Monthly, Last Sat. Tomahawk, WI
(January thru October only)

GENERAL RULES FOR MOST EX-AMINATIONS Be sure to check with sponsors before going to an examination session. There may be changes and/or errors in the dates or information given. Some examinations require filing an FCC or NCVEC Form 605 and advance registration at least 30 days before the exam date. Some VE teams permit walkins. Check with the sponsor.

Many hamfests and swapfests offer examinations. A Hamfest entrance fee should not be charged if you come only to attend the examination. To register in advance, you must get a copy of the current FCC Form 605, and fill it out completely and correctly. Got your form from the FCC as instructed below, or from the American Radio Relay League, 225 Main Street, Newington, CT 06111. Please send an SASE if you request a form from the League. FCC Field Offices seldom stock forms. You can also get a form from

http://www.fcc.gov/formpage.html
or
ftp://ftp.fcc.gov/pub/Forms/Form605.

A form by FAX is available at (202) 418-0177 (request Form 000605). The FCC Forms Distribution Center will accept orders at (800) 418-3676. Form 605 has a main form, plus a Schedule D with two parts (for Vanity and Physician's Certifications). Forms can also be obtained from the sponsoring group.

See QST, W1AW bulletins, or The ARRL Letter regarding any annual exam fee changes. ARRL/VEC no longer gives a free code test or Element 2. Test fees: The ARRL/VEC has set its 2003 test fee at \$12.00. FCC requires applicants to show their original amateur license or CSCE to the VE team. You must also have a good copy of your license or CSCE. A copy of your license or CSCE must be attached to your FCC form 605 and most VE teams need a copy for their records. One good CSCE copy is sufficient. You are also be required to have a photo ID, or two other forms of ID. Contact the VE team for details.

Technician class licensees must show proof of testing before March 21, 1987, in order to upgrade to General with a code test only. Proof must be either in the form of a pre-3/21/87 license document or a "Letter of Verification of Technician License Held Prior to 1987" as requested in writing from the FCC, 1270 Fairfield Road, Gettysburg, PA 17325-7245. For those with internet access, a listing of exam sessions is available from:

http://www.arrl.org/arrlvec/examsearch.phtml

By checking this page, you can find registered VE sessions anywhere in the US and some overseas. You can search by country, state or zip code. The listing is not specific to any particular VEC. It is a master database. Thanks to Bart Jahnke, W9JJ, ARRL/VEC.

Appleton, WI
Fox Cities ARC (ARRL/VEC) All regular test sessions are held at the American Red Cross Building in Appleton. Testing starting at 8 a.m.

No walk-ins after 9 a.m. For information, contact George R. Croy, W9MDP, 2113 Twin Wil-lows Drive, Appleton, WI 54914. (920) 730-0967. Email: w9mdp@arrl.net.

Eau Claire, WI
Eau Claire Amateur Radio Club.
South Middle School, North East side door 7, 2115 Mitscher Ave, Eau Claire, WI
Eau Claire Hamfest. Held at Eau Claire Exposition Center, Lorch Avenue, Eau Claire.
Technician, General and Extra Class ex-ams. Walkins welcome.
Examination session coordinator: Steve Bluem, KA9OMY, ka9omy@arrl.net. Tele-phone: 715-839-6509. www.ecarc.org. w9eau@ecarc.org.

Fond du Lac, WI
Fond du Lac ARC (ARRL/VEC). Com-munity United Methodist Church, 701 Minne-sota Ave., North Fond du Lac. 9:00 a.m. Walk-ins allowed. Contact: Douglas J. Schultz, 920-922-3088, schultz74@charter.net.

Mauston, WI
The Juneau county Amateur Radio Club will be conducting a exam session on December 20, 2003, at 9:30 am, at Mauston City Hall, 303 Manison Street, 4th floor Community room. Prior to the session, some of the VE's and members will be having breakfast at Hearty Platter on hwy 82. All are welcome. Contact Ed Wagner AB9FN, at AB9FN@ARRL.net or Mark Miller W9MKM (608)-847-7571), or at W9MKM@yahoo.com. Walk-ins are welcome.

Madison, WI
First Saturday monthly: 8 a.m. to 10 a.m. Space Place, 1605 South Park Street, Madison. Please bring a picture ID, your original license, a copy of your license, and the original and a copy of any relevant CSCEs, and a check for \$10.00 made out to the ARRL/VEC. No appointments are necessary to take exams. Exams start promptly at 8 a.m. Questions may be directed to Tim Czerwonka, WO9U, at 608-239-3696 (home phone) or sent to wo9u@arrl.net.

Marshfield, WI (ARRL/VEC)
Sponsored by the Marshfield Area ARS. 6:00 p.m. (walk-in allowed). :pcatopm: St. Joseph's Hospital, 611 St. Joseph Ave., Room 124, Hospice Self Bldg, Marshfield, WI. Contact: Lee A. Olson, (715) 389-888. e-mail: lol-sun@t2net.com.

Medford, WI (ARRL/VEC)
Sponsored by the Taylor County Area Amateur Radio Club (ARRL/VEC affiliated). Testing for all classes, Technician through Ex-tra. Registration starts at 7:30 PM, testing starts at 8:00 PM. Location: the conference room of the Medford Public Library, 400 N. Main St., Medford, WI. From the intersection of State Hwys. 13 and 64, proceed west on Hwy. 64 to Main St. Turn north on Main St. and take Main St. to the library. Talk-in on the 147.15(+600 kHz, 114.8 Hz PL) repeater. Walk-ins welcome, however, if you know you'll be attending, it would be appreciated if you call ahead. Contact: Tom Hrdina, N9GEN, 2373 Willow Ave., Med-ford, WI 54451, phone (715) 748-4054 or e-mail to Mike, N9GHZ, at mds54449@yahoo.com.

Menominee, MI
Marinette-Menominee Amateur Radio

Club. Location: The cafeteria of Bay Area Med Center, US-41 in Menominee. Building located next to KFC just off the Interstate Bridge. All classes given. Advance notice preferred, but not required. Test fee is \$10 with two pieces of iden-tification required. Contact Jeff Rymer, N9PQU at jrymer@ez-net.com or Ed Engleman, KG8CX, at dxer@cybrzn.com. We will monitor the 147.000 (107.2 pl) repeater in event further directions or info is needed.

Menomonie, WI
ARRL/VEC. Location: NEWUW-Stout Communications, Millennium Hall, Broadway & 10th Ave., Menomonie, WI. Contact: James P. Ley, 715-235-3998.

Milwaukee, WI
Badger Examiners (W5YI VEC) Septem-ber thru April, every third Saturday morning, 9:30 a.m. to noon. Badger Examiners group tests at AES (Amateur Electronic Supply) at 60th and Good Hope, Milwaukee (use the entrance num-bered 5730). Exams are given at the old Sterman Printing shop, just 300 feet west of the AES store. Novice to Extra are offered, and all test materials are provided. Fee is \$10.00, and bring your original license, or CSCE if needed. Also available are Commercial license exams GROL (General Radiotelephone license), GMDSS, Telegraph, Etc. Fee is \$35.00. For more infor-mation call Gary Sharbuno, WI9M at (414) 355-0237.

Milwaukee, WI
Milwaukee Radio Amateurs' Club (MRAC VEC) Last Saturday, except in March, June, August, and December. In addition, we test at the West Allis RAC Swapfest in January and at Superfest in April. 9:30 a.m. to noon at Amateur Electronic Supply (AES), 5710 W. Good Hope Road (the door you enter is actually numbered 5730), Milwaukee. For additional information, call (262) 797-MRAC. Bring along your original license, CSCE (if any), and one (1) good quality photocopy of each, plus two forms of identification, such a driver's license, etc. Also required is \$8.00 for the exam fee. Walkins are welcome. To register in advance, use a post card. Print the grade of license you are applying for, your name, address, and telephone number, and send the card to MRAC/VEC, Milwaukee Radio Amateurs Club, P.O. Box 070695, Mil-waukee, WI 53207. Contact: John G. Kraak, 262-797-6722.

Onalaska, WI
Riverland ARC (ARRL/VEC). Onalaska Public Library, 741 Oak Street, Onalaska, WI. Contact: Roger Reader, KA9BKK, 608-783-0723, readers@centurytel.net.

Oshkosh, WI (Omro)
Oshkosh VE Team Amateur Radio exams monthly on the first Saturday. Registration be-gins at 8:30 a.m. and exams will be given from 9 a.m. until noon. Omro Community Center, 130 W. Larrabee, Omro, WI. Walkins welcomed. Bring a good quality photocopy of your original license and any other necessary documents such as a CSCE, etc. The first session will be through W5YI/VEC, and then sessions will alternate between ARRL/VEC and W5YI/VEC. The exam fee is \$6.65. For more information, please call Dick Lemme, K9FA, at (920) 235-0987, e-mail: lemme@vbe.com, or write Dick at 826 Jefferson Street, Oshkosh, WI 54901.

Racine, WI
ARRL VEC Monthly - first Saturday, except January, July, and August. Monthly ex-ams are given 9 to 11 a.m. at the Faith United Methodist Church, 1013 Harmony Drive, Racine. Walk-ins are permitted. Talk in on 147.87/.27. Inquiries and registrations should be directed to Paul B. Smedegaard, N9RGW, 929 Lathrop Ave., Racine, WI 53405-2339. Tele-phone: (262) 637 4750. or e-mail to smede-gaa@wi.net.

VE testing dates in Sheboygan County, Wisconsin, for 2003 will be ac-cording to the following schedule:

Sheboygan, WI
Saturdays 8:30 AM, 10, 13 September
Tuesdays 6:30 PM, 18 March, 15 July. 18 November

Sheboygan County ARC (ARRL/VEC). Exams are held in the Red Cross Building, 2032 Erie Avenue, Sheboygan, WI. The test areas are handicap accessible with signage posted to di-rect candidates to the proper area of the build-ing. Walk-ins are accepted, however notifica-tion ahead of time of your intention to appear would be appreciated.

Contact: Art Pahr K9XJ 9 2 0 - 876-2370
N 8 0 2 9 Willow Road
k9xj@arrl.net
Plymouth, WI 53073-2929

Shell Lake, WI
NORWESCO ARES/RACES (ARRL/ VEC). Washburn County Law Enforcement Center, lower level meeting room, 421 Hwy 63, Shell Lake. Walk-ins allowed. This is for all classes of license. Persons wishing to upgrade an existing license should bring a photocopy of it to submit. Also need a photo ID to prove who you are. The fee is \$10.00. Contact: Richard J. Eckenrode, 715-466-4109. Email: cen34109@centurytel.net. Web Site: fp1.centurytel.net/norwesco/.

Tomahawk, WI
Tomahawk ARRL VE Team (ARRL/ VEC). Last Saturday of every month, January thru October. Registration at 8:30 a.m. and test-ing starts at 9:00 a.m. For location or other in-formation, inquire on 145.43 MHz. repeater or contact: Terry Collins, KB9AUP, W6564 High-way 8, Tomahawk, WI 54487. Telephone (715) 453-4633, dcollins@newnorth.net.

Waukesha, WI
Saturday, January 3, 2004. Held at AMF Waukesha Lanes, Near EXPO. (WARAC Mid-winter Swapfest.

St. Paul, MN
Saint Paul Radio Club (SPRC) First Satur-day of the month, 8:30 a.m. Test Site: St. Paul Technical College, 235 Marshall Ave., St Paul, MN. Ed VanCleave, W0VC, (612) 636-0108. www.qsl.net/sprc/index.html.

Rockford, IL
Northern Illinois Volunteer Examiners (W5YI VEC) Third Saturday of every month. 9:00 a.m. to noon. No new applicants after 11:00 a.m. Walkins welcome. Held at North Suburban District Library, 6340 North Second St. (Hwy. 251), Loves Park, IL. Rusty Cordell, WB9QYV, 1823 Hulin St., Rockford, IL 61102-2619. (815) 968-0080. e-mail: WB9QYV@aol.com.

Wisconsin Nets Association Ltd.

Dean R. Herriges, KB9ROB, Secretary
W370 S9590 Highway 67 • Eagle, WI 53119

WISCONSIN NETS

Net	WNA	Freq.	UTC	CDT	Manager
BWN	YES	3985	1100	0600	W9RCW
BEN	YES	3985	1700	1200	KE9VU
WSBN	YES	3985	2230	1730	N9ZET
WNN	YES	3723	0100	1800	KB9ROB
WSSN	YES	3645	0130	1830	WA9ZTY
WIN/W	YES	3662	0200	1900	WB9ICH
WIN/L	YES	3662	0300	2200	W9UW
RCRA	NO	01/61	0030	1930	KA9OMC
(Mondays CDT— Menomonie Area)					
Green Bay Area	NO	72/12	0245	2145	WB9NRK
ARES	NO	4.65/5.25	0200	2100	
(South East/South Central Wisconsin)					

STM Report September 2003

FAQ #16 How do I count traffic handled for my Station Activity Report?

Station Activity Reports are required of appointees such as the Official Relay Station (Want to become one? Contact your STM.), but anyone can submit one. They help us to keep track of how the system is working. These reports are a summary of formal messages handled within a month. You'll hear them sent in this format.

The preamble: Message Number, Station of origin, check, place of origin, date. The text, which is often sent like this: "ORSDT 0/23/35/4/62." It means the number of messages originated, received, sent, delivered, and the total.

So how do you determine these numbers? A message is "originated" if it

comes from a third party and is formatted by the operator. It might be a reply to a delivered message or a message sent by a friend. It is not a message the operator composes. When that message is transmitted to another station, it also counts as a message "sent." A message received from another station is one "received." When that message is delivered to a third party, it also counts as one "delivered."

If your tally reaches 500 or more, you qualify for the BPL Award. The Brass Pounders League recognizes those who have gone to extraordinary lengths to handle many messages. You don't have to win the BPL to be a good traffic handler, to train yourself to do it well when needed. You don't have to handle hundreds of messages to support the National Traffic System. Just do your part, check into nets, take traffic destined for your location, and send some messages when you have the chance. It helps, and it's fun.

FAQ #17 How is out-of-state traffic

routed?

During the day, you will note that out-of-state traffic on the BEN is given to a station going to the Daytime Ninth Region Net – D9RN at 12:30. The traffic is then passed to someone going to the Central Area Net and later exchanged with other area nets by the Transcontinental Corps, TCC, operators. Traffic coming into Wisconsin will be routed through the late session of D9RN at 4:00 p.m. to the Wisconsin SideBand Net.

The night cycles of the NTS work the same – but on CW. Out-of-state traffic on the WSBN will be given to a WIN rep who will take it to WIN and pass it to a station going to 9RN at 7:45 p.m. Traffic for Wisconsin will be picked up on the late session of 9RN and brought to Late WIN and then to the other section nets. For a good explanation of the Nation Traffic System, see the ARRL website or go directly to <http://www.arrl.org/FandES/field/pscm/sec2-ch1.html>. 73 – K9LGU/STM

STM Report October 2003

FAQ #18 How do I qualify for the Public Service Honor Roll?

You've heard those reports handled on the nets. You've seen the credit given to those who qualify in QST. So how do you add your call to that prestigious list? You can check out the details on the ARRL web site at <http://www.arrl.org/FandES/field/pshr/> -- or, for a quick summary of the categories, read on.

1) Participation in a public service net -- 1 point, maximum 40. A public service net is one that is regularly scheduled and handles Amateur Radio formal messages or practices for emergencies -- such as the Badger Weather Net, the Badger Emergency Net, the Wisconsin Side Band Net, the Wisconsin Novice Net, the Wisconsin Slow Speed Net , and both sessions of WIN, the Wisconsin Intrastate

Net. SKYWARN, RACES and ARES nets count, too.

2) Handling formal messages (radiograms) via any mode -- 1 point for each message handled; maximum 40. A "handled" message is defined as a message that is originated or sent or received or delivered. PSHR follows the same method as Brass Pounders' League to count an individual operator's traffic total (also known as station activity report). *There is one point granted for each message handled; maximum 40 points per calendar month.*

3) Serving in an ARRL-sponsored volunteer position: ARRL Field Organization appointee or Section Manager, NTS Net Manager, TCC Director, TCC member, NTS official or appointee above the Section level. -- 10 points for each position; maximum 30. ARRL Field Organization appointees (in alphabetical order) include the following: Assistant Section Managers, District Emergency Coordinators, Emergency Coordinators, Local Government Liaisons, Net Managers, Official

Bulletin Stations, Official Emergency Stations, Official Observers, Official Observer Coordinators, Official Relay Stations, Public Information Coordinators, Public Information Officers, Section Emergency Coordinators, Section Managers, Section Traffic Managers, State Government Liaisons, Technical Specialists.

4) Participation in scheduled, short-term public service events such as walk-a-thons, bike-a-thons, parades, simulated emergency tests and related practice events. This includes off-the-air meetings and coordination efforts with related emergency groups and served agencies. -- 5 points per hour (or any portion thereof) of time spent in either coordinating and/or operating in the public service event; no limit.

This category recognizes the value of public safety communication events that Amateur Radio is often called to participate in. Simulated emergency tests, exercises, and drills are covered by this category. Points are gained by the amount of time that an Amateur Radio operator spends directly involved in operating the

event. This also recognizes the value of off-the-air time it takes to meet with the organization or public service agency to plan and coordinate Amateur Radio involvement.

5) Participation in an unplanned emergency response when the Amateur Radio operator is on the scene. This also includes unplanned incident requests by public or served agencies for Amateur Radio participation. --5 points per hour (or any portion thereof) of time spent directly involved in the emergency operation; no limit.

This category recognizes an Amateur Radio operator who is directly involved in an actual emergency operation. This includes the operator who is on the scene or out in the field, in the shelter, at the emergency operations center, at the hospital, or other served agency's headquarters or their temporary command center. The second sentence of Category 5 invites the Amateur Radio operator who is an active participant in an unplanned

incident -- or in other words, an emergency operation-- to take credit for his/her participation even though he/she is not physically at the emergency scene.

6.) Providing and maintaining a) an automated digital system that handles ARRL radiogram-formatted messages; b) a Web page e-mail list server oriented toward Amateur Radio public service -- 10 points per item.

The portion, "a," recognizes the efforts it takes to provide and maintain an automated digital system (like a packet bulletin board or a PAC-TOR system) that handles ARRL radiogram-formatted messages.

The portion "b," recognizes other effective ways to communicate news and information to the community of radio amateurs that are involved in emergency and public service communication operations and preparedness.

Get involved. Add up your points. Submit your reports monthly to your STM to be recognized for your public service. 73 -- K9LGU/ STM WI

WISCONSIN SECTION MONTHLY NET ACTIVITY SUMMARY SEPTEMBER 2003

NET	QNI	QTC	QTR	SSNS	NM
BWN	1364	1676	2259	30	W9IXG
BEN	505	55	841	30	KE9VU
WSBN	694	96	840	30	N9ZET
WNN	156	19	335	28	KB9ROB
WSSN	190	27	348	29	WA9ZTY
WIN/E	204	65	303	28	WB9ICH
WIN/L	219	61	402	30	W9UW
WRACES	103	106	0	4	N6NKO
totals	3435	2105	5328	209	

Another net worthy of note is the Midwest Classic Radio Net on 3.885 Kc. AM only - Saturdays at 7:30 A.M. -- QNI 103 in 4 sessions.

WISCONSIN SECTION MONTHLY NET ACTIVITY SUMMARY OCTOBER 2003

NET	QNI	QTC	QTR	SSNS	NM
BWN	1456	1764	2434	31	W9IXG
BEN	482	63	835	31	KE9VU
WSBN	654	102	954	31	N9ZET
WNN	146	16	301	27	KB9ROB
WSSN	167	27	313	30	WA9ZTY
WIN/E	213	54	331	31	WB9ICH
WIN/L	226	56	304	31	W9UW
WRACES	111	17	190	4	N6NKO
Totals	3455	2099	5662	216	

Midwest Classic Radio Net 3885 AM only QNI 147 QTR 689 min 4 Sessions

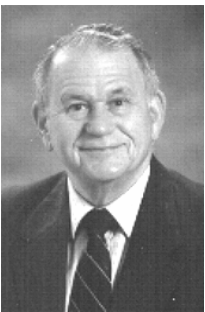
WISCONSIN SECTION STATION ACTIVITY SUMMARY September 2003

STATION ORIG	RCVD	SENT	DLVD	TOTAL	
K9JPS	0	627	32	610	1267 – BPL
W9IHW	1	174	32	173	390 – BPL*
K9GU	0	145	29	144	318 – BPL*
N9TVT	0	93	157	0	250
N9CK	0	118	115	3	236
W9CBE	0	50	61	2	113
K9LGU	0	73	36	4	113
W9SWL	32	19	49	2	102
K9FHI	0	34	55	3	90
AG9G	0	21	68	0	89
WA9ZTY	0	34	37	5	76
W9UW	0	44	23	1	68
KE9VU	0	23	30	0	53
W9BHL	0	3	34	0	37

(Continued on page 5)

The Computer Corner

By Stan Kaplan, WB9RQR • 105 Martin Drive
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Skaplan@mcw.edu



No. 113. The Virtues of Speed Disk

You have probably read before in my column that I consider the Norton Utilities (Symantec Corporation) as the single most important piece of third party software a Windows user can buy. That opinion still holds, whether you are using Windows 3.1, 95, 98, ME, 2000, XP, or whatever. It finds problems and fixes them, taming the unruly, bloated, complicated Windows environment into something that most users can work with. Enough said about Windows. Anyway, the Norton Utilities are included in their suite, Norton Systemworks. Version 2004 is the latest release as of this writing (Oct 2003).

One of the Norton Utilities is Speed Disk, which takes the place of the Defrag program that comes with Windows. As an aside, Norton programmers (presumably under contract to Microsoft) wrote the Defrag program itself, but Defrag is much smaller and less capable than Speed Disk. I proved the origin of the Defrag program by examining its code in Windows 98se, which indeed contains the signature of the Norton Utilities group. Actually, Peter Norton himself made his reputation (and started his company) with his invention of Speed Disk, way back in the early years of computing.

Speed Disk does indeed defragment your drive, putting pieces of a file together in contiguous blocks of data. That makes your computer work faster and more efficiently, as I have written about before. But it does something else; too, that insures the integrity of your data. Something that is really not documented anywhere. At least, I have not been able to discover any documentation in the “white papers” and other documents on the Symantec web site. Before I tell you exactly what else Speed Disk does, let me give you a bit of background.

As you are aware, data is written to a hard drive’s platters by a tiny electromagnetic “head”, which flies over the platter’s surface. Electrical pulses, sent to the head, creates a magnetic field, which in turn, can alter the magnetic properties of a tiny section of the platter called a domain. To simplify a bit, if that tiny section is pulsed with the magnetic field of the head, it becomes a one. If it is not pulsed, it remains a zero. The pattern of ones and zeros is how the data is stored. For example, the capital letter “A” shown between the quotes in this sentence is stored in my computer as a pattern of eight binary digits: 01000001, while the lower case letter “a” is a different pattern of eight digits: 01100001. The point here is not what the patterns are, but rather that the platter has to be magnetized or demagnetized to “write” the data in whatever pattern is desired. And, those pat-

terns of magnetic domains are the only way that data is stored on your hard drive.

The rub is that storing data on a hard or floppy drive by writing magnetic domains with an electromagnetic head is not permanent. That is, when a one is written, at some interval of time (months to years), the magnetic domains will bleed down (get weaker) and the computer will no longer recognize that spot as a one. To avoid this and the associated possible loss of data, one needs some program that will read all of your data and rewrite it again, so as to refresh the magnetic domains and make them strong again. You know about this. You have probably done something similar yourself. If you rub a steel screwdriver on a permanent magnet, the screwdriver becomes magnetic itself and will nicely hold steel screws in place while you turn it. But that induced magnetic property will not last. After a few hours or days, it will become too weak to be of much use, and you have to rub the screwdriver on a magnet again, to refresh its magnetic holding power.

This is where Speed Disk comes in. Through careful observation, I have noticed that it does something unusual at certain intervals, when run repeatedly. I don’t know whether those intervals are timed in terms of elapsed days or hours, or whether they are timed in terms of the number of times Speed Disk has been run. But, in my case it seems to happen about every 5th or 6th time that I run the program. What it does is to pick up essentially all the data, lets say packed into the first quarter of the drive, and move it to the end of the drive. Then, after another 5 or 6 Speed Disk sessions, it picks up all the data and moves it back to the beginning of the drive.

Why is this important? When it moves all the data from one part of the drive to another, it is writing all the data anew, thus refreshing the magnetic domains (albeit in a new spot on the platter). It is as if all those programs had been freshly installed, or all those word processing files had been newly written. All the magnetic domains are at their peak strength. The screwdriver has just been rubbed on a powerful permanent magnet.

The Norton programmers were very clever to have done this. If they had not, the magnetic domains of that program you installed 4 years ago might be getting dangerously weak by now. Indeed, some of the ones might have been read as zeros already, and the resulting corrupted file might have ceased to work properly. But, quietly in the background, Speed Disk prevents this while defragging your hard drive. At some (unknown) interval, it refreshes all your magnetic domains, without fuss or muss. And you didn’t even know it was being done! Thank you, Symantec. Happy Computing!

Check us out on the web at
Http://www.bsسسs.org

WISCONSIN SECTION ACTIVITY SUMMARY

(Continued from page 4)

KG9B	0	4	27	0	31
KJ9W	0	0	30	0	30
AA9BB	0	0	24	0	24
KB9ROB	0	21	2	0	23
WB9ICH	0	18	3	1	22
W9RSX	0	4	10	4	18
KA9RZL	0	11	2	2	15
KN9P	0	6	0	6	12
K9UTQ	0	3	4	3	10
WD9FLJ	3	2	3	2	10
W9PVD	0	1	0	1	

P S H R SUMMARY September 2003

CALL	1	2	3	4	5	6	T
N9TVT	40	40	10	0	350	0	440
K9JPS	40	40	10	130	0	0	220
KB9KEG - AUGUST	30	35	20	0	85	10	180
WA9ZTY - JULY	40	40	30	50	10	0	170
WA9ZTY	40	40	30	50	10	0	170
KA9RZL	40	15	30	40	0	0	125
AG9G	40	40	20	25	0	0	125
K9LGU	40	40	20	20	0	0	120
W9BHL	40	37	30	0	0	0	107
KB9KEG	40	33	20	0	0	10	103
W9CBE	40	40	20	0	0	0	100
WD9FLJ	40	10	10	20	0	10	90
W9RSX	40	18	10	0	0	0	68

WISCONSIN SECTION P S H R SUMMARY October 2003

CALL	1	2	3	4	5	6	T
N9VE	37	40	30	220	0	0	327
WA9ZTY	40	40	30	50	40	0	200
K9JPS	38	40	10	105	0	0	193
WA9ZTY- JULY	40	40	30	50	10	0	170
AG9G	40	40	20	50	0	0	150
KA9RZL	40	30	30	20	0	0	120
K9LGU	40	40	20	15	0	0	115
W9BHL	40	34	30	5	0	0	109
KB9KEG	40	32	20	0	0	10	102
W9CBE	40	40	20	0	0	0	100
WD9FLJ	40	8	10	25	0	10	93
W9RSX	27	15	10	0	0	0	52

WISCONSIN SECTION MANAGER REPORT

OCTOBER 2003

WISCONSIN: SM: Don Michalski, W9IXG, SEC: WB9RQR, STM: K9LGU, ACC: Open, SGL: AD9X, OOC: N9VE, PIC: W9UQ. TC: K9GDF, BM: WB9NRK, ASM: K9UTQ, W9RCW, W9CBE, N9VE, W9DGI.

** With regret, I inform you of the passing of Joe Priebe, Sr., W9YZS, age 79. Joe was a member of RMRA. Also, Charles Luyster, K9NH, age 70. Chuck was a member of the the Fox Valley Amateur Radio Club and the Green Lake Amateur Radio Club. He was a member of Winnebago County ARES-RACES. K6SAY, Herbert Fullenwider, 86, is a Silent Key.

** We welcome back Frank Woehrl, K9DNF, ex-KC9EML of Marshfield after a 39 year absence (personal solar cycle dip) from ham radio!

** The Wisconsin Valley Radio Association now has a newsletter called "The Carrier". It includes a regular YL corner and other unique columns. Well done, Myron, KB9STB! The WVRA will be moving their repeaters to the WFXS Fox 55 transmitter site. Look for their big signal on 146.640, 444.100, 224.640 and 144.390 APRS. And, don't miss their

auction on November 4 at 7 p.m. at the Marshfield Clinic. <http://www.wvraclub.org>

** The Rock River Radio Club license classes ran both a Technician class and General class on the same evenings! Between class sessions, Pat, WB9JIC, ran code practice while the students took a breather! Whew! Perhaps, a model for future classes.

** The 46th annual Boy Scouts of America Jamboree on the Air will take place on October 18-19. This event includes both Boy Scouts and Girl Scouts. We have ask hams to "register" their JOTA event at <http://www.arrl.org/FandES/ead/youthskeds/>. This procedure is helpful during the last minute scout calls looking for a Ham who is participating in JOTA.

** I suggest everyone checkout, regularly, the new Central Division web site: <http://www.central.arrl.org/> Thanks to Dick Isely, W9GIG, for an informative site!

** Our thanks to Ed, AA9W, and the Ozaukee Radio Club for their assistance in helping W9DGI and myself take down the beams and tower for Sus,

(Continued on page 8)

Mancorad Radio Club

Theresa Hartlaub, KB9KXE
Secretary

P.O. Box 294 • Manitowoc, WI
54221-0204



2-Meter Repeater: 146.01 Input/146.61

October 2003

The Mancorad Radio Club held its Oct. meeting on Oct. 8th at 7:30 led by President Fred (W6BSF). Secretary's report and Treasurer's report were read and accepted by the members present.

The yearly Christmas party will be held Jan. 2nd at Cedar Ridge again this year. Chicken and ribs family style will be served. Cost is 9.00 per person, with the club picking up the remaining \$2.10. If you wish to exchange gifts, bring a gift marked man or lady. Also we will be having the door prize game again. That seemed to be one of the highlights last year. Please let Bob (KB9INK) or Dick (N9QFY) by the 29th of Dec. if you are attending. Also please pay Dick for the banquet by Dec. 29th.

President Fred announced he will be sending out the yearly membership renewal forms in Oct. Please fill these out and return to the next meeting or by mail to Dick (N9QFY). The dues need to be paid by the end of Dec.

Ken (WB9OBX) donated 2 beams and other misc. items.

Thank you Ken.
ARRL is looking into dropping morse code . It is noted that most other countries have already dropped the code.

November 2nd is the Fox Cities Hamfest at Waverly Beach. Fred has handouts. Exams will also be held during the day.

Pres. Fred brought up the subject of next year's family picnic. The rental prices are going up to 78.75 for next year.

After some discussion, the board will look into other places available and see if they can find something a little less costly. A place would need an area to hold the t-hunts. More info on this next meeting.

Discussion on the subject of a club scholarship. More information coming in the future. Think about if you would like to see the club establishing one.

The awards committee, Bob (KB9INK), Ken (K9HAG) and Dick (N9QFY) are collection names for the Ham of the Year award. This will be given out at the Christmas Party. Any ideas, please contact one of them.

Through FEMA funding and Nancy Crowley, it looks like the club will have a power supply and rig set up in the hazmat trailer. This should be a big plus in the event of an emergency.

No word from Ron Shimek as to when repairs will be made to the antenna on the tower. Fred will contact him about this.

All members are to watch the Herald Times for a feature article written on our youngest member, Travis (KB9YRC).

It seems during the last nuclear drill, Travis caught more than one persons eye for his professionalism and quickness in running the radio transmissions. Congratulations to Travis for this great honor.

Shawn (KC9AAH) showed off his 75 watt portable radio system that he made. He used a deep cycle marine battery for the power source and a wheeled tool box unit to hold all his equipment. Good job, Shawn.

Results from the voting process are as follows: President, Fred (W6BSF), Vice President, Carl (KA9WYK), Treasurer, Dick (N9QFY) and Secretary, Theresa (KB9KXE).

New on the board are Gene (KB9KXF) and Shawn, (KC9AAH). Thank you to all those who ran. Thank you also to Red (N9GHE) and Bob (KB9INK) who went off the board for all your time given in the past.

The attendance pot goes to \$13.00 for next meeting.

Meeting adjourned at 8:45. Lunch was served.

Respectively submitted,
Theresa (KB9KXE), Secretary

Meeting Attendance:			
W6BSF	Fred	KB9INK	Bob
N9GHE	Red	KB9KXE	Theresa
KA9WYK	Carl	N9FVZ	Dan
KB9RYC	Travis	KX9AAH	Shawn
K9DUX	Bill	KB9GOY	Mary
K9HAG	Ken	N9WUN	Chuck
N9NCU	Dan	WB9VTM	Lyle
N9VIA	Oran	KB9EME	Vern
NZ9Z	John	KB9KXF	Gene
N9QFY	Dick		

Homeland Security Grant

In June 2003 Jim Staatz KG9RA, Emergency Coordinator and Gale Sorum WD9HFT, Technical Committee Chairmen made application for a Homeland Security Grant through Hal Swanson KB9UHP, Eau Claire County Emergency Manager.

The Grant has been approved in the amount of \$ 10,700.00.

The money will be used to improve the 146.910 MHz. repeater system with a new central repeater and five remote receive sites. This new

system will enhance the ability of ARES members in the Chippewa Valley to provide public service communications.

Via Mack Brophy, N9NTB , WEM Amateur Radio Liaison

A Pocket Response to Terrorist Incidents pamphlet has been made available by the Wisconsin Emergency Management. DMA Pam 2050 is available on the bsss.com website and you can print copies as you need them.

- N9NTB

Wisconsin Valley Radio Association

Jerry Graebel - W9GLG

P.O. Box 363 • Wausau, WI

Program: The program for the month of October was to view a video from the Weather Channel called Storm Stories, about the Siren, Wisconsin tornado. The program gave first hand interviews with some of the people who survived the storm. This was an F3 tornado and almost destroyed the entire town. For more information on the event you can see <http://www.skywarn.ampr.org/010618.htm> on the web.

Meeting Minutes of October 7, 2003 at Marshfield Clinic - Wausau Center. President Mark Rasmussen called meeting to order at 7:50 P.M.

Present: W9GLG, N9MEA, KC9DOS, N9MO, KB9DED, K9YF, N9NRC, N9NQW, WA9NBC, KB9ZOF, KB9YDP, K9JXW, N9PHC, K9MIX, N3FDE, W9PBB, N9LIA, K9QM, N9TTA, KC9EQS, N9NMH, KB9RXXA, KC9AEJ, KC9BSK, KB9STB, KC9ASL, K9DB, N9NRA, KB9VBR.

Treasurer's Report:
Motion to accept: N9NRA, Second: N9NMH

Secretary's Report: Minutes of the December 3, 2002 meeting were accepted as published in Badger State Smoke Signals and/or posted on the WVRA Web Site. www.wvraclub.org.

Old Business:

1. The APRS Digi is still off the air. There is a plan to have it back up soon. There will be an email sent to all members as soon as it is back up. Mark, N9MEA and Michael, KB9VBR went to the meeting of the Black River Area Amateur Radio Association to give an APRS demonstration. The presentation raised some interest from the members and we hope to see them on APRS soon.

2. Bill, WB2TLQ has stepped down from the Public Education position on the board. There was only one person interested in the position. Trena, KC9ASL has accepted the position and has stated that she is looking into the "Big Project" as explained at the last meeting by Don, W9IXG.

3. Simulated Emergency Test (SET) will be coming up soon. This is a test so no date has been set. The idea is to test the emergency preparedness of local amateur operators. Try to operate under emergency power if you can, so warm up the generators and charge up the batteries.

4. The 75-meter net is back. It appears to have found a home on 3.994 Mhz. On Monday nights at 9:15 p.m. KB9VBR is looking for two net control operators. One for the Wednesday Night Swap Net for the fifth Wednesday and the other for the second Thursday Discussion Net. If you are able to be the Net Control for one or both of these nights please contact Michael at kb9vbr@wvraclub.org.

5. The City of Wausau will celebrate Halloween on Saturday, November 1, 2003 from 4:00 p.m. to 7:00 p.m. The WVRA will be working the Halloween Patrol and is looking for volunteers. If you can be a rover or net control please contact Myron at kb9stb@wvraclub.org.

6. There will be a Technician workshop sponsored by the WVRA on October 18th and 19th at the American Legion Golf Club, 1001 Golf Club Rd. in Wausau. The workshop will start at 9:00 a.m. and run until 5:00 p.m. on Saturday, and 9:00 a.m. to 2:30 p.m. on Sunday. There will be a VE Testing session for all license classes at 3:00 p.m. after the class. The workshop is based on the book "Now You're Talking". The book will be needed for the class. If you, or someone you know is interested in the class, please contact Myron at kb9stb@wvraclub.org. There is also a need for help from any VE who can attend the testing session. If you can help with the testing con-

tact Jerry at w9glg@wvraclub.org.

7. The November meeting will be the WVRA Club Auction. If you have any items you would like to bring to the auction, please contact Myron at kb9stb@wvraclub.org so he can have an idea on what will be there. The room will be available after 6:00 p.m. so everyone can setup. The auction will start at 7:00 p.m. There will also be pies and other baked goods up for auction. There will be a 10% donation to the WVRA Repeater Tower Project from all items sold. The normal business meeting will be waved for the month due to the auction.

8. The second installment of "the Carrier" has been sent to members via the web. There is also a review and link to the club web page in the Wisconsin Section Newsletter so it can be viewed by others. Myron, KB9STB has done a very good job on being the creator and editor. If you have an article you would like to see in The Carrier, contact him at kb9stb@wvraclub.org.

9. Mark, N9MEA thanked all who helped to remove the repeater equipment from Rib Mountain. He wanted the members to know that Matt, N9NMH had put in a lot of time on this project. The repeater is now on the Fox 55 tower at the 375' level. This only the 2 meter and 440 repeaters. The repeater is working well for mobiles but there are several poor spots in Wausau for HT use. The repeater will be on the new frequency after some testing and new PA's have been installed. The new frequency will be 147.135 with a + offset and a PI of 114.8. The PL tone will be dropped for all the nets so those without tone can check in.

10. The Fund Raising Committee has some events coming to help raise funds for the Tower Project. There will be a "Coins for QSO's" bowling fundraiser on Friday, November 14th at 7:00 p.m. You can help by getting sponsors donate a fixed amount or an amount for each pin in a 3 game series. Please let Myron know if you will attend so he can reserve the correct number of lanes. All money should be turned in before the end of November. On Friday October 24th there will be on "Open House and Pampered Chef Party" with a twist. Pampered Chef to the WVRA Tower Project will donate a percentage of the total party sales. This will be an informal presentation. If you plan to attend please RSVP to Lisa, KC9DOS at lmrazz1@gte.net or by calling 675-4872. On January 10th 2004, there will be the first annual WVRA 9 Pin Tap Bowling Tournament. Registration will be at 12:30 p.m. and start time will be 2:00 p.m. Four Person teams or singles are welcome. Cost will be \$25 per person and \$10 for doubles per team. This will be a handicap tournament. This is a non-sanctioned event. Handicap will be 90 % of 220. Average will be current or last book average. Non-league bowlers will have average of 160 for men and 150 for women. Space is limited to 40 teams. If you have any questions or you need an entry form contact Myron at kb9stb@wvraclub.org. If you have any god ideas for the fund raising committee, contact kb9vbr@wvraclub.org. It was mentioned by Mike, KB9DED that we could sign up for the milk program at Quick-Trip. This is on the bagged milk and 5 cents per container will go to the club. This under consideration by the committee.

11. Jack, N9LIA mentioned that the MS walk date has changed. It will now be on April 18th 2004.

New Business:

1. Mike, KB9DED has not heard from the Badger State Games Committee yet. There is a meeting scheduled for the Special Olympics and he will attend and report the info at a later date.

2. The WVRA will again be in the Christmas

(Continued on page 7)

Wisconsin Valley Radio Association

(Continued from page 6)
Parade on December 5th. There will be a need for ideas and work to decorate float or even the WVRA Trailer for the parade. The parade will start at 7:00p.m. Please be at Marathon Park at 6:30 if you plan to walk in the parade. The volunteers to decorate for the parade are KB9DED, KB9RXA, KB9VBR, N9NMH, N9MEA and KC9DOS. There is also a desire to attend the Mosinee Christmas Parade the next day.
3. Jon, KC9AEJ mentioned that Bill, WB2TLQ was also the Webmaster for the club web page. Dave, N9KNY, has accepted this job. He is updating the page regularly. Thank You Dave.

Meeting adjourned at 8:50 P.M N9FDE
Second - KB9STB

The next meeting will be Tuesday November 4, 2003 at 7:00 P.M. at the Marshfield Clinic - Wausau Center Cafeteria. (Formerly known as the Wausau Medical Center). Park and enter from the main parking lot at the main entrance on the East side of the building. Call in on 2-meter club repeater if you need directions: frequency is 146.640 (pl 114.8).

Respectfully submitted,
Jerry Graebel - W9GLG w9glg@arrl.net)
WVRA Secretary

NWS TO PRESENT
PUBLIC SERVICE AWARDS

(Continued from page 1)

operator training and initiation of the Winter Skywarn program. Mr. Kucharski’s outstanding efforts contributed directly to successful completion of the NWS mission of saving lives and preventing property damage.
Mr. Leekley is recognized for his outstanding contribution to the WFO Milwaukee amateur radio program. Mr. Leekley recognized the need for major reorganization of the amateur radio communications structure between clubs and WFO Milwaukee. Mr. Leekley organized a breakfast gathering to kick-start the reorganization process and willingly provided his expert assistance in the reorganization. Mr. Leekley’s outstanding efforts contributed directly to successful completion of the NWS mission of saving lives and preventing property damage.
Mr. David L. Barquist is recognized for his outstanding contribution to the WFO Milwaukee amateur radio program. Mr. Barquist provided many years of expert electronic and technical support as well as donating equipment used for amateur radio communications at the WFO. Mr. Barquist’s outstanding efforts contributed directly to successful completion of the NWS mission of saving lives and preventing property damage.
MASA is recognized for its outstanding contribution to the WFO Milwaukee severe weather warning program. Under the guidance of Skip Voros and Richard Swierczynski, MASA established a Skywarn web site (http://www.mke_skywarn.org/), established annual six- hour spotter forums and promoted the program via educational, scientific, and charitable outreach. MASA’s outstanding efforts contributed directly to successful completion

1. Interesting Facts
2. Butterflies taste with their feet.
3. A duck's quack doesn't echo, and no one knows why.
4. In 10 minutes, a hurricane releases more energy than all of the world's nuclear weapons combined.
5. On average, 100 people choke to death on ball-point pens every year.
6. On average people fear spiders more than they do death.
7. Ninety percent of New York City cabbies are recently arrived immigrants.
8. Thirty-five percent of the people who use personal ads for dating are already married.
9. Elephants are the only animals that can't jump.
10. Only one person in two billion will live to be 116 or older.
11. It's possible to lead a cow upstairs ... but not downstairs.
12. Women blink nearly twice as much as men.
13. It's physically impossible for you to lick your elbow.
14. The Main Library at Indiana University sinks over an inch every year because when it was built, engineers failed to take into account the weight of all the books that would occupy the building.
15. A snail can sleep for three years..
16. No word in the English language rhymes with "MONTH."
17. Average life span of a major league baseball: 7 pitches.
18. Our eyes are always the same size from birth, but our nose and ears never stop growing. SCARY!!!
19. The electric chair was invented by a dentist.
20. All polar bears are left-handed.
21. In ancient Egypt, priests plucked EVERY hair from their bodies, including their eyebrows and eyelashes.
22. An ostrich's eye is bigger than its brain.
23. TYPEWRITER is the longest word that can be made using the letters only on one row of the keyboard.
24. "Go," is the shortest complete sentence in the English language.
25. If Barbie were life-size, her measurements would be 39-23-33. She would stand seven feet, two inches tall.
26. A crocodile cannot stick its tongue out.
27. The cigarette lighter was invented before the match.
28. Americans on average eat 18 acres of pizza every day.
29. Almost everyone who reads this will try to lick their elbow.
- Don't forget to pass these weird facts on to everyone you know. They will get a kick out of it!!
- You tried to lick your elbow, didn't you?

Left over from Halloween - One Liners !

How does the witch know what time it is?
She looks at her witch-watch!

What did the Mommy ghost say to the baby ghost?
Don't spook until your spooked to!

How do vampires get around on Halloween night?
By blood vessels!

What happened to the guy who couldn't keep up payments to his exorcist?
He was repossessed!

Do monsters eat popcorn with their fingers?
NO, they eat the fingers separately!

Why do ghosts and demons get along so well?
Because demons are a ghosts best friend!

Where do ghosts go on vacation?
The Eerie canal!

Where do ghosts buy their food?
At the ghost-ery store!

Why doesn't anyone like Count Dracula?
He's a pain in the neck!

Where do ghosts mail their letters?
At the ghost office!

What's a ghosts favorite ride at the carnival?
The roller ghoster

What's a ghosts favorite fruit?
Booberries!

How do you mend a broken Jack-o-lantern?
With a pumpkin patch!

What is a witch's favorite subject in school?
Spelling!

When does a skeleton laugh?
When something tickles his funny bone!

Well with the above, that’s it for another year. Material for the February 2004 issue should be sent by the first of January if possible, and no later than the 15th. Have a good holiday season and see you next year.

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(Continued from page 5)

KB9OC.

** Jim, KA4UPW, from the ORC, kindly restored a classic Philco radio for the local Senior Center. I'm sure the residents will appreciate Jim's efforts!

** Gregg, W9DHI, and Stan, WB9RQR, are leading an ORC class on kit building. The Ten-Tec Superhet SWL receiver is an excellent first choice. I encourage other clubs to get members to build equipment. Remember those happy days? Fun, you bet!!

** From our STM, Denny, K9LGU: Station Activity Reports are a summary of formal messages handled within a month and sent in this format. The preamble: Message Number, Station of origin, check, place of origin, date. And the text: "ORSDT 0/23/35/4/62." It means the number of messages origi-

nated, received, sent, delivered, and the total. Messages which are originated or delivered involve a third party. How is out-of-state traffic routed? During the day, out-of-state traffic on the BEN is sent to the Daytime Ninth Region Net -- D9RN at 12:30. Traffic comes into Wisconsin through late D9RN at 4:00 p.m. to the Wisconsin SideBand Net. Out-of-state traffic on the WSBN will be given to a WIN rep who will pass it at 7:00 p.m. to a station going to 9RN at 7:45 p.m. Traffic for Wisconsin will be picked up on the late session of 9RN and brought to Late WIN and then to the other section nets. -- K9LGU/STM

** It was a pleasure talking to the members at MRAC, WVRA, and FLARC and I look forward to seeing you at the upcoming hamfests on November 1 and 2. Check out the Hamfest calendar details at the Wisconsin site: <http://www.arrl.org/sections/?sect=W173>, Don, W9IXG

NOVEMBER 2003

SM: Don Michalski, W9IXG. BWN 3985 0500-0715 W9IXG. BEN 3985 1200 KE9VU. WSBN 3985 1715-1800 K9FHI. WNN 3723 1800 KB9ROB. WSSN 3645 1830 WA9ZTY. WIN-E 3662 1900 WB9ICH. WIN-L 3662 2200 W9UW. CTN 3994 Mondays @ 2000 KC9IS (All times are Central)

** With regret, I inform you of the passing of Clyde Richelieu, 94, formally W9JS. Clyde facilitated the 1928-29 Admiral Byrd expedition at the South Pole by relaying messages for supplies to New York. Bob Thorne, K9DAF, 66, passed away. Bob was a life long member of the Fox Valley VHF Association and a member of the Fox Cities ARC. Abel Perlman, N29C, 52, passed away.

** National Weather Service (NWS) office, and working in conjunction with the ARRL, Skywarn Recognition Day (SRD) has been set for Saturday December 6th from 0000-2400 UTC. SKYWARN Recognition Day is not a contest, but a way for the National Weather Service to thank all Amateur Radio Operators for their hard work during the severe weather season. It also gives the chance for NWS forecast offices to contact each other and for Amateurs to contact various NWS forecast offices across the country. For more information, see the following website: <http://hamradio.noaa.gov/>

** Do you enjoy using your hobby to work for a Cause, e.g., ARES/RACES, SKYWARN, or Public Service events? If so, here is another one that could use your help. Collect important weather data at your home for the National Weather Service!! Every morning a number of Wisconsin amateurs check into the nation's oldest net -- the Badger Weather Net on 3985 KHz to pass the 24 hour high and low temperature plus precipitation and snow fall. This "Ground Truth" data is used by the NWS to update their radar models that estimate precipitation from the reflected radar images. It is, also, used to provide input to the Wisconsin River Forecast Model, the FEMA (to determine amount of disaster relief), FAA, etc. A very worthwhile cause! So, before you jump into your car for the ride to work, just check into the BWN and give your figures to the Pickup Station on duty. You're in and out in a couple of minutes! The net operates 7 days a week from 5 a.m. to 7:15 a.m. For more information, contact me- W9IXG@arrl.org.

We need more reporting stations and I hope you can become a member of the BWN!

** In June 2003 Jim Staatz KG9RA, Emergency Coordinator and Gale Sorum WD9HFT, Technical Committee Chairmen made application for a Homeland Security Grant through Hal Swannstrom, KB9UHP, Eau Claire County Emergency Manager. The Grant has been approved in the amount of \$ 10,700.00. Congratulations, Jim & Gale!!

** From our STM, Denny, K9LGU: FAQ #18 How do stations qualify for the Public Service Honor Roll? You can check out the details on the ARRL web site at <http://www.arrl.org/FandES/field/pshr/> -- or, for a quick summary of the categories, read on. 1) Participation in a public service net -- 1 point, maximum 40; 2) Handling formal messages (radiograms) via any mode -- 1 point for each message handled; maximum 40; 3) Serving in an ARRL-sponsored volunteer position: e.g. Field Organization appointee -- 10 points for each position; maximum 30; 4) Participation in scheduled, short-term public service events such as walk-a-thons, bike-a-thons, parades, simulated emergency tests and related practice events. -- 5 points per hour (or any portion thereof) of time spent in either coordinating and/or operating in the public service event; no limit; 5) Participation in an unplanned emergency response when the Amateur Radio operator is on the scene. --5 points per hour (or any portion thereof) of time spent directly involved in the emergency operation; no limit; 6.) Providing and maintaining a) an automated digital system that handles ARRL radiogram-formatted messages; or b) a Web page e-mail list server oriented toward Amateur Radio public service -- 10 points per item Get involved. Add up your points. Submit your reports monthly to your STM to be recognized for your public service. 73 -- K9LGU/ STM W1 ** 2003 JOTA SURVEY/REPORT FOR USA PARTICIPANTS--- Your completed JOTA report is important! The information is needed to assist the BSA headquarters and ARRL in compiling the final US report is sent to the World Scout Bureau. The deadline for ham/scouts to submit the report is November 30. The report form is at this site: <http://www.arrl.org/FandES/ead/jotalog/> 73, Don, W9IXG

ARRL Wisconsin Section Manager: Donald E. Michalski, W9IXG w9ixg@arrl.org

QST de W1AW
ARRL Bulletin 62 ARLB062
Winter Operating Schedule

From ARRL Headquarters
Newington CT October 27, 2003
To all radio amateurs

SB QST ARL ARLB062
ARLB062 W1AW 2003/2004 Winter Operating Schedule

Morning Schedule:		
Time	Mode	Days
-----	----	-----
1400 UTC (9 AM EST)	CWs	Wed, Fri
1400 UTC (9 AM EST)	CWf	Tue, Thu

Daily Visitor Operating Hours:
1500 UTC to 1700 UTC - (10 AM to 12 PM EST)
1800 UTC to 2045 UTC - (1 PM to 3:45 PM EST)

(Station closed 1700 to 1800 UTC (12 PM to 1 PM EST))

Afternoon/Evening Schedule:		
2100 UTC (4 PM EST)	CWf	Mon, Wed, Fri
2100 " "	CWs	Tue, Thu
2200 " (5 PM EST)	CWb	Daily
2300 " (6 PM EST)	RTTY	Daily
0000 " (7 PM EST)	CWs	Mon, Wed, Fri
0000 " "	CWf	Tue, Thu
0100 " (8 PM EST)	CWb	Daily
0200 " (9 PM EST)	RTTY	Daily
0245 " (9:45 PM EST)	VOICE	Daily
0300 " (10 PM EST)	CWf	Mon, Wed, Fri
0300 " "	CWs	Tue, Thu
0400 " (11 PM EST)	CWb	Daily

Frequencies (MHz)		

CW:	1.8175 3.5815 7.0475 14.0475 18.0975 21.0675 28.0675	147.555

RTTY: - 3.625 7.095 14.095 18.1025 21.095 28.095

147.555

VOICE: 1.855 3.990 7.290 14.290 18.160 21.390 28.590 147.555

Notes:
CWs = Morse Code practice (slow) = 5, 7.5, 10, 13 and 15 WPM
CWf = Morse Code practice (fast) = 35, 30, 25, 20, 15, 13 and 10 WPM
CWb = Morse Code Bulletins = 18 WPM

CW frequencies include code practices, Qualifying Runs and CW bulletins.

RTTY = Teleprinter Bulletins = BAUDOT (45.45 baud) and AMTOR-FEC (100 Baud). ASCII (110 Baud) is sent only as time allows.

Code practice texts are from QST, and the source of each practice is given at the beginning of each practice and at the beginning of alternate speeds.

On Tuesdays and Fridays at 2330 UTC (6:30 PM EST), Keplerian Elements for active amateur satellites are sent on the regular teleprinter frequencies.

A DX bulletin replaces or is added to the regular bulletins between 0100 UTC (8 PM EST) Thursdays and 0100 UTC (8 PM EST) Fridays.

In a communications emergency, monitor W1AW for special bulletins as follows: Voice on the hour, Teleprinter at 15 minutes past the hour, and CW on the half hour.

FCC licensed amateurs may operate the station from 1500 UTC to 1700 UTC (10 AM to 12 PM EST), and then from 1800 UTC to 2045 UTC (1 PM to 3:45 PM EST) Monday through Friday. Be sure to bring your current FCC amateur license or a photocopy.

The W1AW Operating Schedule may also be found on page 109 in the November 2003 issue of QST or on the web at, <http://www.arrl.org/w1aw.html>. NNNN

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(Continued from page 10)

THE PACKETEER

Current packet radio technology dates to the 1970s, believe it or not. Most of the current packet radio technology is unchanged since the mid-1980s. We're still using a digital communications protocol that was intended only to be temporary, and it is badly out of step with what's available on the internet. Therefore, it is of limited use to the Emergency Management community.

Notice I said "limited use...". We can still use it for some things, such as E-Mail, but the process can be cumbersome if one is not properly equipped for it. As most user links are at 1200 bps, it's slower than internet users find acceptable.

Building a New Network

Building a network has always proven to be a challenge. Usage justifies need, and capability sparks usage. In order to provide capability, we need to replace our current infrastructure with higher-speed networks capable of carrying TCP/IP, the protocol set used in the internet, and it needs to be carried painlessly (unlike our current system). This makes for an interesting "Chicken-and-Egg" situation.

Amateur operators, like the general public, would like to have fun with their digital experience. In order to attract Amateur Radio users, we need to provide facilities and activities that are fun. That's why we need the speed and capability of the Internet - yet radio-based.

In order to provide these capabilities, we need to build a new, much more capable network, which will stimulate usage. Usage will generate the expansion of the network and get more people interested in building that network. We saw this in the 1980s and 1990s when packet radio enjoyed nearly explosive growth.

WAPR and the Future

Suppose we have growth in the packet radio user base with newer technology. Increased activity and more digital communications do not build a network - a network needs to be coordinated, managed and maintained in order to be useful.

WAPR has in the past done just that. WAPR is a frequency coordinating and network management body. We oversaw a lot of packet network growth in the past, and did so in a coordinated fashion. WAPR members were the first in this state to experiment with 9600 baud backbones, TCP/IP operation and putting web pages on packet. WAPR members know what it takes to make a network work.

Any future technology needs to be carefully evaluated before implementation and implemented correctly. The organization has experience with this that can be very valuable.

In short, WAPR is the ideal organization to manage and propel future packet growth.

Future Technologies

There are two main technologies that hold promise for future packet radio networks. One has been embraced by the ARRL, the other is being marketed by Icom. Both have advantages and disadvantages. The focus of this article is not to fully explore them both, but a brief discussion is in order to show that there is hope.

The ARRL has started a "High-Speed Multimedia Working Group" and has attempted to standardize Amateur adaptation of 802.11 digital wireless consumer equipment. These are the wireless networking cards that operate under the FCC Part 15 rules in their bare-bones form, and are used with higher power than their consumer counterparts by Amateurs.

These cards are relatively easy to put on the air, are relatively inexpensive, and are enjoying quite a bit of use these days. The ARRL has a vision

of what they call the "Hinternet", a contraction for Ham Internet.

However, it needs to be noted that anyone can use these devices legally and many do. The band reserved for 802.11b, for example, is the 2.4 GHz band and it is rapidly becoming populated by hams and non-hams alike. In addition to the wireless network cards, one can also find cordless phones, wireless speakers and any variety of wireless consumer products populating that band. This means a significant possibility of both interference and congestion, making the wireless network card speed that is advertised unattainable in a lot of circumstances.

In addition to this fact, Hams cannot count on an easy Amateur-Only network - these wireless cards provide a significant security risk. It is a popular activity amongst "Crackers", the Black-Hat hackers, to drive around looking for networks to break into. While constructing a network using this technology may look tempting, it may not be the best solution.

Enter the Japan Amateur Radio League (JARL) and Icom. The JARL and Icom jointly developed D-Star, a digital radio system that not only is capable of data operation, but digital and analog voice as well. It operates on the 1.2 GHz band, and does not compete with the Part-15 wireless cards on the 2.4 GHz band.

It is truly an Amateur solution and provides a lot of promise. It operates at 128 Kbps for end users (about twice as fast as dial-up internet service), and 10 Mbps (Ten Million bits per second) on it's 10 GHz backbone models. It is tailor made for Amateur operation, so your call-sign is on every packet (just as now). I invite you to check it out at:

<http://www.icomamerica.com/amateur/dstar>

It needs no additional TNC, just a computer with a network card and a free USB port (RS-232 serial ports are not supported). In addition, you don't have to spend hours configuring a NOS station to enjoy capabilities of internet-style digital communications. Oh, and it can act as a gateway to the internet.

Where to Now?

That's up to all of us. WAPR can get in on these new technologies and oversee the building of a new network that is capable of everything that hams find useful and appealing (including internet-compatible operation). However, we need a sustained commitment from the amateur community to see it happen.

Emergency communications people are perhaps the first potential adopters of the newest packet technology in whatever form it takes. And they are in the best position to implement a backbone network. But they aren't the only ones who can benefit - any interested amateur can.

So I propose that anyone who may have an interest in a new, improved and vastly more capable packet radio system keep watching this space in the coming months. Next month, we'll introduce you to the Icom ID-1 D-Star transceiver. We'll tell you all about how they work, and talk about actual field trials that I have been fortunate enough to be a part of.

After that, we'll investigate the 802.11 technology. Subsequent articles will ask report on the interest level we've seen and what direction the packet community in Wisconsin will take for the future.

Eventually, we'll measure the future potential of WAPR and see if it will remain a viable packet development entity, or pass on into the ether. WAPR needs something to do, and people to do it with. Otherwise, it will not move forward.

As always, I welcome your comments and you may pass them on by E-Mail or regular Postal Mail - my addresses are at the top of this page.

That's all for this time.
Until next time, 73 from Andy.

32nd ANNUAL MIDWINTER

Ham Radio, Computer, Electronics

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Future Date: January 8, 2005

QST de W1AW ARRL Bulletin 67 ARLB067 DIRECTOR ELECTIONS

Frank Fallon, N2FF, retained his seat as Director of the League's Hudson Division, defeating Vice Director Steve Mendelsohn, W2ML, 1933 to 1470. Ballots were counted November 21 at ARRL Headquarters. The Hudson Division's was the sole contested seat in the current director-vice director election cycle.

During his tenure as Hudson Division Director, Fallon has been a member of all standing committees and now sits on the Administration and Finance Committee. In addition, Fallon has served on the ARRL Executive Committee for four years and is on the ARRL Foundation Board.

Joyce Birmingham, KA2ANF, was the lone candidate for the vice director's seat that Mendelsohn vacated to run for the division's top spot.

Incumbents running unopposed and declared elected are: **Director Dick Isely, W9GIG, and Vice Director Howard Huntington, K9KM, in the Central Division;** Director Tom Frenaye, K1KI, and Vice Director Mike Raisbeck, K1TWF, in the New England Division; Director Greg Milnes, W7OZ, and Vice Director Jim Fenstermaker, K9JF, in the Northwestern Division; and Director Dennis Bodson, W4PWF, and Vice Director Les Shattuck, K4NK, in the Roanoke Division.

Three-year terms of office elected candidates begin at noon on January 1.
NNNN

We also came across some other research as how the brain can decode "written trash" with no problem... here is the example:

Aoccdrnig to rscheearch at Cmabrigde Uinervtisy, it deosn't mttiae in what oreDr the ltteers in a wrod are, the olny iprmoehtn tihg is taht the frist and lsat lttee be at the rghit pclae. The rset can be a total mses and you can stll raed it wouthit porbelm. Tihs is bcuseae the huamn mind deos not raed ervey ltter by istlef, but the wrod as a wlohe

Amzanig huh?

Spell checker sure had fun with this one.

Check us out on the web at
[Http://www.bsos.org](http://www.bsos.org)



THE WISCONSIN PACKETEER

Wisconsin Amateur Packet Radio Association
Allen Schnepf, N0GMJ, Treasurer
Ogema, WI 54459

Andy Nemec, KB9ALN, Editor—453 Cottage Grove Avenue—Green Bay, WI 54304—e-mail: kb9aln@gbonline.com

WAPR News - December, 2003

Hello again everyone. On behalf of everyone involved in WAPR, I wish you Happy Holidays, a Happy New Year and many more.

"The Wisconsin Packeteer" took a little vacation from the Badger State Smoke Signals last issue. There were a lot of things going on for me at deadline time, and there was just no time to finish everything and make it coherent. As a result, there is some news that needs to be reported.

Network News

Two recent developments that don't mean good things for the Wisconsin Packet Network are on the agenda first. Their impact on our network is significant, too.

Al, formerly KB9BYQ and now K9ALS has decided to shut down his Appleton node stack and BBS after more than 10 years of operation. This impacts the network in two ways. First, his node stack was a "switch" between two network branches on different frequencies. Second, his BBS fed packet mail to a great many of the BBSs in Wisconsin.

So now, the Fox Valley has no node other than the one on Bob KA9JAC's BBS. And it goes nowhere as of now. The North and East network that serves Green Bay northward to Michigan's Upper Peninsula, Door and Kewaunee Counties cannot connect to the Western network. The Western network used to extend from Waupaca to the Minnesota border, and southwest to Madison.

There's even more bad news, although it may be a temporary situation. The Tomah node stack is also off the air because of a site closing. There is the potential for a new site on the horizon and there are people who are willing to operate it when it can be moved to a new site. Stay tuned here for any changes in that situation.

The immediate effect of this closing is that La Crosse is now not able to go East. Currently, Walt AA9AW has his BBS off the air - no feed means no users, no users means no need to have a BBS. He has, however, said that he will reactivate the BBS if the Tomah node is placed back into operation.

The worst problem posed by these closures is the lack of a digital radio network for Emergency Communications purposes. Very few places can connect via packet to the State Emergency Operating Center. This is one more mode of communications that is sorely needed to supplement our voice channels in Drills or Emergency situations. We need the ability to both keyboard chat or send large amounts of data in relatively short times.

Another side-effect of these closings is that few BBSs in Wisconsin are able to get any messages. My own BBS in Green Bay has not seen anything new since mid-September. It is still up and operational, and I intend to keep it that way as long as there is promise of the network being reconnected. There is also the possibility of more exciting news coming forth (see the companion article here in this issue titled "High-Speed Packet, WAPR and the

Future"), so there may be even more interesting things to do on packet aside from the BBS.

While this is a serious situation that can eventually be fixed, it does make us appreciate the work that people like Al have done to keep their node stacks on the air - often when it required a significant commitment of resources to do it. It reminds us to say Thanks to Al and the folks who have been tending the Tomah site (as well as the site owners themselves for their past accommodation). We do appreciate their past efforts as we now see how much of a contribution they've made.

New BBS

In contrast to the node closures, we have news of a BBS going on the air. Southern Wisconsin ARES is putting up a BBS on 145.61 MHz to support their operations. The call is KB9UNX and it's located in the Janesville area. Plans call for it to run FBB software. As I hear more, I will pass it on here in this column.

WAPR's Status

Lately, I've been getting inquiries concerning the current status, as well the future of WAPR. Some have noticed that the web site hasn't been updated in a while, and others have heard about the network closures and are concerned.

No question about it, Packet Radio as we

know it is at a crossroads, and so is WAPR. The current officers have been involved in the operation of the organization for several years and unable to spend much more time keeping the organization up-to-date and moving forward.

Exciting possibilities exist, but new blood and new ideas and new talents are needed. The companion article to this report is the first of a series concerning updating our packet radio system, why WAPR should become an important part of it, and why it's worth it to keep an organization like WAPR viable. Please read it and consider what the future could bring, and how it can help in Amateur Radio's mission of public service through communications.

If nothing is done, WAPR - like many other leading packet radio groups - will, sadly, wither on the vine and die. In short, I am saying that WAPR's future is up to the Wisconsin Amateur Radio Public and in order for the public to invest their time and energy into WAPR, this public needs to know why. That's what this and the following articles are all about.

I am interested in hearing your comments and will relate them here, if you approve. Some of the focuses of these articles are possible future directions we can take, and we are all open to suggestions. Please pass them on.

That's all I have for this time.

Until next time, 73 from Andy.

Packet Radio, WAPR and the Future

by Andy Nemec, KB9ALN

In the past several years, we've seen a steady decline in the packet radio user base, meaning less packet radio activity overall. The purpose of these articles is to first explain why we need a good packet network and user base, examine why the current system is in decline, and to present alternatives to the current situation. In addition, we'll discuss WAPR's role in the future of packet, as well as what WAPR needs to do to survive and grow.

What's Packet Good For, Anyway?

Regular readers of The Wisconsin Packeteer columns probably can anticipate the answer to this question. Many times I have related my experiences concerning the value of Packet Radio in Emergency Communications situations. Now more than ever, the ability to communicate digitally is essential. A lot of Emergency Management is done via the Internet and connection to it - which are vulnerable in any number of ways, in spite of their usual robustness. In order to successfully provide a backup communications role for Emergency Management, we need to be able to provide all of the services that the internet does and be able to link into it when necessary. Understand I am not saying that we should build a packet network through the internet, merely have the capability to link into it should the need arise.

(Continued on page 9)

WISCONSIN AMATEUR PACKET RADIO MEMBERSHIP APPLICATION

PLEASE PRINT:

NAME: _____ CALL: _____ HOME PHONE: (_____) _____

ADDRESS: _____ CITY: _____ STATE: _____ ZIP: _____

HOME BBS: _____ FREQ: _____ (Listing your home BBS is important)

MY PACKET STATION OPERATES: _____ DAY _____ - _____ NIGHT _____ 24 HOURS

I OPERATE A: _____ DIGIPEATER WITH AN ALIAS OF: _____

_____ FULL SERVICE BBS

PRIMARY PACKET INTERST/EXPERTISE IS: _____

_____ YES: I want to receive Badger State Smoke Signals and I understand that part of my dues will go to pay the subscription. Cost \$20.00.

_____ NO: I do not wish to receive Badger State Smoke signals as part of WAPR membership. Cost \$15.00.

Complete and return this form with your check or money order — \$15.00 for membership only or \$20.00 for membership and Badger State Smoke Signals, made payable to W.A.P.R. to: Wisconsin Amateur Packet Radio Association, Allen Schnepf, N0GMJ, Treasurer, Ogema, WI 54459

accepted as presented by consensus.

Old Business:
Ham Classes
Bill, N9KXX, reported to the membership and officers that at the November First classes session, of eight people signed up two attended and six were absent. This resulted in one on one instruction. He will try to contact the no shows about the November Eighth session. Also he has not received the Now Your Talking books due to a shipping error at the ARRL, tracking information indicates they will arrive Friday November 7.

ARRL:
Bill, N9KXX, informed the club and officers that the club gets a discount from the ARRL bookstore. He stated that if the club members would be interested an order could be put together of materials that members would want to order for themselves.

Christmas Party :
A reminder was made followed by a short discussion about the club Christmas Party. The party will be on December 7, 2003 at:

Fitz's on the Lake
W11602 County Road V
Okee WI

There will be no formal meeting of the Yellow Thunder Club In December. Peter Sweeney, WD9JIB, was asked how this would affect the ARES/RACES meeting. He announced that Sauk County ARES/RACES will not have a meeting in December of 2003. His next meeting will follow the January YTARC meeting. We are looking forward to seeing our members at Fitz's and hope a great time is had by all.

New Business:
Eagle Report:
Bill, KC9VCD, gave a a list of frequencies of eagles tagged in the Sauk City area to attending club members, also a map showing last locations of eagles radio tagged there.

Club Newsletter:
Bill, N9KXX, brought to the table the subject of a club newsletter. Discussion was held on what information it could contain. Discussion of possible content included:what the club has done and is doing for the amateur community and community in general, meeting dates, notice of dues, ect. Subject tabled until next club meeting.

2004 Meeting Dates:
Steve, N9UDO, proposed that the club set meeting dates for this up coming year. Steve asked the membership if the club should stay with the rotating meeting days. After some discussion, a motion was made by Maurey, KA9TBU, to stay on rotating days. Motion was seconded, and approved by voice vote with one nay.

The 2004 meeting schedule will be as follows:
January Tuesday Jan 6
February Wednesday Feb 4
March Thursday Mar 4
April Tuesday Apr 6
May Wednesday May 5
June Thursday Jun 3
July Tuesday Jul 6
August Wednesday Aug 4
September Thursday Sep 2

October Tuesday Oct 5
November Wednesday Nov 3
December Thursday Dec 2

Board Meeting:
Meeting will be held at the club president's residence at 1900 on Wednesday November 12 to appoint a board member at large.

Badger State Smoke Signals:
Bill, N9KXX, mentioned that the BSSS is available as an email before the hard copy hits the mail. This would be the email that is sent to the printing house. For more information contact please contact Ken Ebnetter, K9EN k9en@arrl.net. Discussion followed. Reminder, BSSS web edition is available at <http://www.bsss.org/>

Dues:
Steve, N9UDO, brought to the table the subject of dues for the upcoming year. Subject was discussed, Motion was made by Rick, N9ROY, to maintain the dues at \$20 yearly, seconded by Bill, N9KXX. Motion approved by voice vote.

Missing Balloon
Bill, KC9CVD, mentioned about the balloon discussed at last months meeting has not been located. Steve, N9UDO gave a report on the project. It's last known location, as reported in last months minutes, was 2 miles north of Mukwonago and reported headed south.

Wisconsin Adventure Race:
Joe, WB9SBD, offered thanks to the members of this club that participated in maintaining communications during the WI Adventure Race last August, and was grateful to the club for the use of the WB9FDZ repeater by the volunteers. A donation was made to the club by the Wisconsin Adventure Race organization. A heartfelt thank you to Joe and the Adventure Race.

Zilch:
Tom, N9PQJ, made an announcement that the next Zilch breakfast would be on November 30, 2003 at 1030 (10:30 am) at the Farm Kitchen south of Baraboo. All are welcome to attend.

A motion was made to adjourn by Bill, KC9CVD, seconded by Rick, N9ROY. Motion carried. Adjourned at 2000 (8:00 pm CST)

Upcoming Yellow thunder Events:
Christmas Party December 7, 2003
January Meeting January 6 ,2004

Minutes respectfully submitted,
Robert Loomis KB9VSQ, YTARC Secretary

Yellow Thunder Amateur Radio Club Home Page <http://www.qsl.net/ytarc/>

Members and Friends in Attendance:
Joe Mayenschein WB9SBD LaValle
Linda Mayenschein KA9CHM LaValle
Bill Stehling KC9CVD Sauk City
Rick Plouffe N9ROY Wisconsin Dells
Maurey Gurgel KA9TBU Reedsburg
Thomas Harrison N9PQJ Reedsburg
Bill Klinkner N9KXX Sauk City
Steve Schulze N9UDO Baraboo
Pete Sweeney WD9JIB Reedsburg
Robert Loomis KB9VSQ Reedsburg

Yellow Thunder Amateur Radio Club

WB9FDZ (Original Club Call)
K9ODK (Robert L. Prine Memorial Call)
Club net: Sundays 8:00 p.m. on 147.315
Robert Loomis, KB9VSQ, Secretary
108 Scarlet Ct., Reedsburg, WI 53959
YTARC Home Page: <http://www.qsl.net/ytarc/>

October Meeting Minutes

The October meeting was called to order at 7:15 p.m. by club president Steve, N9UDO. The meeting was held in the EOC Meeting Room at the Sauk Co. Court House.

Treasurer's report provided by Bill, N9KXX. The club account balance stands at \$3016.98. An agreement has been signed for the building at the fair grounds for next year's Ham Fest. The Smoke Signals subscription is due, and the club will be purchasing 10 "Now You're Talking" books for the upcoming ham classes. Treasure's report accepted by members.

September minutes approved as published via e-mail, motion by Tom, N9PQJ and seconded by Dave, KB9CSW to accept.

Old Business:

HAM Classes
Ham radio classes for technician license will be held on Saturday, November 1, and November 8, 2003 at the Prairie Du Sac Fire Dept. Station, 855 17th Street in the Prairie Du Sac Industrial Park. Registration will be from 0800 - 0900 on November 1, 2003. Classes run from 0900 to 1700 with one hour lunch and morning and afternoon breaks. Testing for the technician class license will be on November 8, 2003 at 1300. "Now You're Talking" will be used as a study guide, and will be available from the YTARC. Class requirements: Pre study with "Now You're Talking" book. Handouts will be given out at the class. Call Bill Klinkner, N9KXX @ 608-643-6908 or Steve Schulze, N9UDO @ 608-356-2313 for more details. Donald Michalski, W9IXG will be doing an ARRL presentation at the class.

Bill, N9KXX is looking for help for the Nov. 1st morning and afternoon classes, and on Nov. 8th in the morning session. Bill has contacted local newspapers and has placed an ad about the classes. Bob, KB9VSQ will contact community calendars to do the same.

New Business

Election of club officers
Nominations are:
Steve, N9UDO - President.....no further nominations
Tom, N9PQJ - Vice President.....no further nominations
Bill, N9KXX - Treasurer.....no further nominations
Bob, KB9VSQ - Secretary.....Bill, KC9CVD withdrew from nominations and no further made.

With no further nominations being made, Bill, N9KXX made motion to close elections, 2nd by Wayne, N9UDX. Motion passed. Motion by Lynn, KB9YOD to accept those nominated for club officers to be duly so elected, 2nd by Rick, N9ROY to accept, motion passed. Board elected as read.

Christmas Party
This year's Christmas party will be held at Fitz's On The Lake in Okee on Dec. 7, 2003. Brunch starts at 1130. Enclosed is more information about

the party.

Fitz's On The Lake Restaurant W11602 Cty Road V Okee, WI Phone (608) 592-3302
If anything changes, Fitz's will contact Cliff Johnson, KC9CMC.

Rick, N9ROY, requests a donation from the club towards the annual Lake Delton Halloween Party. The party is sponsored by the Lake Delton Lion's Club and provide area children a safe Halloween celebration.

Request discussed at length by members present. It was suggested that the club donate \$25.00. Pete, WD9JIB made motion to let group decide via hand vote, Wayne, N9UDX 2nd. Hand vote to donate \$25.00 towards the Lake Delton Halloween Party - yeah: 6, nay: 4. Motion to donate to the party passed.

LOST Balloon, last known location: 2 miles north of Mukwonago to points south. The balloon was launched 7 miles west of Lake Delton. At this writing, it is not known where the elusive balloon has wandered to.

Steve, N9UDO thanked Lynn, KB9YOD for the past years service as club secretary.
Motion to adjourn meeting made by Maury, KA9TBU, 2nd by Rick, N9ROY. Meeting adjourned at 8:05 p.m.

NEXT CLUB MEETING: NOVEMBER 5, 2003 @ 7:00 pm AT THE SAUK CO. EOC MEETING ROOM IN THE BASEMENT OF THE SAUK CO. COURT HOUSE, 510 BROADWAY, BARABOO - USE THE WEST (BROADWAY STREET) ENTRANCE.

Respectfully submitted,
Lynn Loomis, KB9YOD, YTARC Secretary

Yellow Thunder Amateur Radio Club Home Page <<http://www.qsl.net/ytarc/>>

Members and friends attending:
Lynn Loomis KB9YOD Reedsburg
Robert Loomis KB9VSQ Reedsburg
Maurey Gurgel KA9TBU Reedsburg
Dave Spearing KB9CSW Portage
Peter Sweeney WD9JIB Reedsburg
Rick Plouffe N9ROY Wisconsin Dells
Bill Stehling KC9CVD Sauk City
Wayne Burgess N9UDX Lodi
Bill Klinkner N9KXX Sauk City
Steve Schulze N9UDO Baraboo
Thomas Harrison N9PQJ Reedsburg

November Meeting Minutes

Club Business:
The November meeting was called to order at 1912 (7:12 PM CST) on November 05, 2003, by the club President, Steve Schulze, N9UDO. The meeting was held in the EOC meeting room at the Sauk County Court House in Baraboo WI.



Motion was made to approve the October Minutes as published, motion was seconded.

Treasurers report was provided by Bill Klinkner, N9KXX. The club account stands at approximately \$. State incorporation fees and the donation to the Lake Delton Lions Club Halloween Party had been paid out this month. The treasurers report was

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SWAPFESTS

 <p>2002 WINNER Michael J. Haessler, KB9TG Waupaca, WI.</p> <p>32nd ANNUAL MIDWINTER SWAPFEST WAUKESHA EXPOSITION CENTER WAUKESHA, WISCONSIN SATURDAY JANUARY 3, 2004</p> <p><i>Both sponsored by: THE WEST ALLIS RADIO AMATEUR CLUB, INC. P. O. BOX 1072 • MILWAUKEE, WISCONSIN 53201</i></p>	<p><i>HAM IT UP EVERY SPRING!</i> MADISON SWAPFEST Mandt Community Center <i>APRIL 18, 2004</i> 400 Mandt Parkway Stoughton WI Doors open at 8 a.m. Sponsored by MARA/W9HSY P. O. Box 8890 Madison, WI 53708-8890 swapfest Information Line. (608) 245-8890</p>	<p>SOUTH MILWAUKEE AMATEUR RADIO CLUB SWAPFEST 03 JULY 10, 2004 (Held every July) <i>American Legion Park</i> <i>Shepard Avenue • Oak Creek, WI</i> (414) 762-3235 Ask for Verne P.O. Box 102 South Milwaukee, WI 53172 e-mail ryatex@aol.com</p>		
<p>SEWFARS SWAPFEST HAM RADIOS • COMPUTERS • ELECTRONICS AMATEUR LICENSE EXAMS</p> <p>Setup starts at 6:00 A.M. For more information, call (414) 835-7035</p>	<p>The Chicago FM Club presents RADIO EXPO 2002 September , 2004 Lake County Fairgrounds, Rts. 45 and 120 Grayslake, Illinois Free parking • Amateur Exams • Talkin 146.16/76 Info Voice mail and FAX: (708) 457-0966 http://www.chicagofmclub.org P.O. Box 56784, Harwood Heights, IL 60656-0724</p>	<p>TRI-COUNTY ARC PRESENTS HAMFEST 2004 March 21, 2004 YOUR SPRING FAVORITE ! Www.cmdline.com/tcarc/ TCARC 213 Frederick St (920) 563-6381 Fort Atkinson, WI 53538 Evenings</p>		
 <p>NS9RC <i>fest</i> formerly known as LAMARfest Lake County Fairgrounds, Grayslake, Illinois Radio, Electronic, Computer Swapfest www.ns9rc.org</p> <p>MARCH 28, 2004 Grayslake, IL</p>	<p>Eau Claire Amateur Radio Club HAMFEST 2004 Saturday, September 11 2004</p> <p>For Information Contact: Steve Bluem at (715)839-6509 ka9omy@arri.net ECARC P.O. Box 1867, Eau Claire. WI 54702-1867</p>	<p>The Milwaukee Repeater Club presents AMATEUR RADIO FEST 2003 November 2004</p> <p>Waukesha County Expo Center Forum Buildings For more information, see: http://www.execpc.com/mrc e-mail mrc@mrc91.org or call 1.608.367.3953</p>		
<p>Ozaukee Radio Club 23rd ANNUAL RADIO AND COMPUTER SWAPFEST MAY 01, 2004 8 a.m. to 1 p.m. • Circle B Recreation Center Intersection of Highway 60 and County I Exams by Badger Examiners, c/o Gary Sharbuno, 5119 W, Willow Rd., Brown Deer, WI 53222 Swapfest sponsored by the Ozaukee Radio Club W55 N865 Cedar Ridge Drive • Cedarburg WI 53012</p>	<p>Circus City Swapfest Sponsored by the Yellow Thunder Amateur Radio Club Saturday, August 14, 2004 • 7 am—Noon Sauk County Fairgrounds • Baraboo, WI</p> <table border="1"> <tr> <td>Vendors • Concessions Camping • Free Parking Tail Gate Area</td> <td>\$4.00 — Advanced \$5.00 — At Gate \$5.00 — 8 foot tables</td> </tr> </table> <p>Steve Schulze, N9UDO • Bill Klinkner, N9KXX (606) 356-2313 • (608) 643-6908/643-6453 http://www.qsl.net/ytarc/hamfest.htm,</p>	Vendors • Concessions Camping • Free Parking Tail Gate Area	\$4.00 — Advanced \$5.00 — At Gate \$5.00 — 8 foot tables	<p>SOUTH MILWAUKEE AMATEUR RADIO CLUB AUCTION Amateur Radio, Computers & Electronics Wed. March 7, 2004, 6:00 p.m. <i>American Legion Post 434</i> <i>Shepard Avenue • Oak Creek, WI</i> (414) 762-3235 Ask for Verne P.O. Box 102 South Milwaukee, WI 53172 e-mail: ryatex@aol.com</p>
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WA9SAB, 920.563.6381.

Grafton
Ozaukee Radio Club (ORC) Second Wednesday of each month at 7:30 p.m. Grafton Multipurpose Senior Center, 1665 7th. Ave., Grafton, Wisconsin www.qsl.net/orc/.

Green Bay
GREEN BAY MIKE AND KEY CLUB Meetings: Second Thursdays, 7:30 p.m., Media Services area of J. M. Science Building at St. Norbert College in DePere. Information: Kevin at kb9sne@yahoo.com.

Green Lake
GREEN FOX AMATEUR RADIO CLUB Greater Green Lake County area. Meetings: Third Mondays, 7:30 p.m., Green Lake Town Hall, intersection of County Highways K and N.

Hudson
St. CROIX VALLEY RADIO AMATEURS Meetings: Third Tuesdays, St. Croix County Emergency Government Center, Carmichael Road, Hudson. Short business meeting at 7:30 p.m. followed by program. Talkin: 145.13 MHz. All are welcome!

Juneau
ROCK RIVER RADIO CLUB Meetings: First Tuesdays, 7:30 p.m., Dodge County Administration Building, 127 East Oak Street, Juneau, WI. ARES Nets: 146.64 (-600) Mondays, 7:30 p.m., Saturdays, 7277 KHz, 10:30 a.m.

Madison
SPACE PLACE AMATEUR RADIO CENTER No meetings. Located on U.W.-Madison campus. Guest operators are welcome to operate the U.W. Space Place Amateur Radio Station, N9UW. Information: Don Michalski, W9IXG, President, (608) 263-4685. Email: n9uw@sal.wisc.edu.

Madison
BADGER AMATEUR RADIO SOCIETY University of Wisconsin - Madison/W9YT Meetings: Third Mondays at 7:00 p.m. in UW Union South. Room number posted on the Today in The Union board. Information: Don Michalski, W9IXG, (608) 263-4685. Email: w9ixg@arrl.org. Web: <http://www.qsl.net/w9yt>.

Madison
Madison DX Club, meetings are on every fourth Tuesday of each month; see <http://madisondxclub> for more details.

Madison
FOUR LAKES AMATEUR RADIO CLUB Meetings: Third Tuesdays, 7:30 p.m., Red Cross Building, 4860 Sheboygan Avenue, Room C, downstairs. First building west of Hill Farms State Office Building.

Manitowoc
MANITOWOC COUNTY RADIO AMATEURS (ManCoRad) Second Wednesday of each month. Club board meets at 6:30 p.m., and Regular meeting is at 7:30 p.m., at 1105 Fleetwood Drive, 2nd floor (Old County Shop building on northwest side of city.) Additional information: Fred Neuenfeldt, W6BSF, (920) 682-9312. Email: fredw6bsf@lakefield.net.

Marinette WI
Menominee MI
Amateur Radio Club Meetings held second Thursday 7:00PM each month BAMC Tenth Avenue Menominee Michigan in the basement. Guests welcome e-mail secretary ke9ad@arrl.net

Medford
Black River Amateur Radio Association Meetings: Normally the first Thursday of each month. Usual meeting time is 7 PM. Most meetings are held at the Taylor County Courthouse. Directions: Those attending should park in the main courthouse parking lot on the east side of the building, and enter using the main courthouse entrance or the sheriff's dept. entrance. Proceed to the lower level of the courthouse using the stairs or elevator. We meet in the "break room" on the lower level, near the Emergency Government office. Talk-in on the 147.15 repeater (114.8 Hz PL, +600 kHz offset) and 146.52 MHz simplex. Contact: Mike Schoenfuss, N9GHZ, P.O. Box 401, Abbotsford, WI 54405. Phone: (715) 223-3996.

Menomonee Falls
FALLS AMATEUR RADIO CLUB, INC. Meetings: Last Wednesdays at Bank One building in Germantown. Doors open 7 p.m. Meeting time: 7:30 p.m. Guests are welcome!

Menomonie WI
Saturday coffee at Burger King, 544 Main Street, at 9 a.m. Social hour on 4th Tuesdays at 7:00 p.m. at the Depot, 2616 Hills Court, north of Walmart on highway 25 North, in January, March, April, and September through November. Guests welcome!

Milwaukee
GREATER MILWAUKEE DX ASSOCIATION Meetings: Fourth Monday of month, 7:30 p.m. Contact any GMDXA member, or Gary Schwartz, K9GS, (262) 363-4439. Email: garyk9gs@arrl.net.

Milwaukee
MILWAUKEE RADIO AMATEURS CLUB Meetings: Last Thursdays, 7:00 p.m. Redemption Lutheran Church, 4057 North Mayfair Road, Wauwatosa, WI. Mailing address: P.O. Box 070695, Milwaukee, WI 53207. Web: <http://www.qsl.net/mrac> . Email: w9rh@arrl.net.

Monomonie

RED CEDAR REPEATER ASSOCIATION, INC. Saturday coffee at Hardee's in North Monomonie, corner of Highways 12 and 25 at 9 a.m. Social hour on 4th Tuesdays at 7:30 p.m. at the Peppermill Too, 1414 9th Street in the L-Mart Shopping Center in January, March, April, and September through November. Guests welcome!

Northeast Area
NORTHEAST WISCONSIN DX ASSOCIATION Meetings quarterly: April 28, Marinette; August 25, Fox Valley; November 10, Green Bay. For specific information about meetings, check <http://home.new.rr.com/newdxa/>. Contact us at w9dxa@arrl.net.

Oak Creek
SOUTH MILWAUKEE AMATEUR RADIO CLUB Meetings: First Wednesdays, Legion Post #434, Shepard Ave., Oak Creek, WI. In March and October the meetings are turned into Auction Nights. Swapfest July 6, 2002. The club WEB site is www.qsl.net/wa9txe

Onalaska
RIVERLAND AMATEUR RADIO CLUB Meetings: First Tuesdays, 7 p.m., Onalaska Community Center. More information: <http://www.qsl.net/wr9arc/> . Email: wr9arc@qsl.net.

QCWA Chapter 162
QUARTER CENTURY WIRELESS ASSOCIATION (QCWA) Southeastern Wisconsin Chapter 162. Meetings: Third Monday in January, March, May, July, September, and November, 7:30 p.m., usually at Meadows Restaurant, Franksville, WI. Social events: Third Sundays in February, April, June, August, and October. Christmas party: Usually second or third Sunday in December.

QCWA Chapter 55
QUARTER CENTURY WIRELESS ASSOCIATION (QCWA) Wisconsin Chapter 55 meets the first Saturday of June and October. For information about Chapter 55, contact Ron Yokes, W9BCK, Secretary, 612 N. Pt Washington Road, Grafton, WI 53024-9703. (262) 375-1774. <mailto:rryokes@execpc.com>. Saturday, October 4, 2003, Watertown Moose Club, Watertown, WI.

Racine
LAKESHORE REPEATER ASSOCIATION Meetings: Last Tuesday, January, April, July, October. American Red Cross Building, 4521 Taylor Ave., Racine, WI.

Racine
RACINE MEGACYCLE CLUB Meetings: Second Mondays, 7:30 p.m., American Red Cross Building, 4521 Taylor Ave., Racine, WI.

Rhineland

Appleton
FOX CITIES AMATEUR RADIO CLUB Meetings: Third Mondays, 7 p.m., Columbus Club, 2531 N. Richmond Street, Appleton, WI Information: Pat, K9IK, 920.725.1149. PLa-tour428@aol.com Web: <http://www.w9zl.ampr.org/>.

Baraboo
BADGERLAND AMATEUR TELEVISION SOCIETY (BATS) Check BATS Web page: <http://www.shopstop.net/BATS/>

Baraboo
YELLOW THUNDER AMATEUR RADIO CLUB Meetings: See the YTARC column elsewhere in this issue for meeting times and locations. For further information: <http://www.qsl.net/ytarc>.

Dubuque, IA
GREAT RIVER AMATEUR RADIO CLUB Meetings: First Monday of each month, 7 p.m. at the Red Cross Center, 2400 Asbury Road. The club serves the tri-state area. On the Web: <http://www.qsl.net/wb0lob/>. Information or questions to: N0hdc@aol.com.

Eau Claire
EAU CLAIRE AMATEUR RADIO CLUB Meetings: 2nd Tuesday - 7 p.m., Eau Claire Parks & Recreation, 1300 First Ave., Eau Claire, WI 54703. All hams and guests welcome. W9EAU repeater 146.91 MHz, tone 110.9 Hz. Information: Jim Staats, KG9RA, President, P.O. Box 1867, Eau Claire, WI 54702-1867. Phone (715) 838-9108, Email kg9ra@ecarc.org. Web page: <http://www.ecarc.org>

Fond du Lac
FOND DU LAC AMATEUR RADIO CLUB Meetings: Second Monday at Moraine Park Technical College, Fond du Lac, WI. Time: 7 p.m. Sunday net: 7:30 p.m. CDT, K9IA repeater, 145.430 - PL 107.2 Information: Jack Heil, KG9IN, 920.922.1413. Email: kg9in@fdlhams.org Web: <http://www.fdlhams.org>.

Fort Atkinson
TRI-COUNTY AMATEUR RADIO CLUB Thursday monthly except June to August, 7 p.m., at Dwight Foster Public Library in Fort Atkinson. ARES Net each Wednesday evening at 8 and club net Monday evenings at 8 on 145.49 repeater. Contact: Glenn Eisenbrandt, WA9VYL, 920.563.6502, or John Satterlee,

NORTHWOODS AMATEUR RADIO CLUB
Meetings: Third Tuesday of Sept., Nov., Dec., Feb., and April for dinner business meetings at Ella's Restaurant, Jct. of Hwy. 51 and 70, north side of Woodruff, WI. Talkin on Sayner or Tomahawk repeaters. The Northwoods ARC News is on the club web site. <http://www.freeyellow.com/members7/nwarc>.

Sheboygan
SHEBOYGAN COUNTY AMATEUR RADIO CLUB
Meetings: Second Tuesdays. 7 p.m., Sheboygan County Red Cross/Boy Scout Building, 2032 Erie Avenue.

Shell Lake
NORTHLAND AMATEUR RADIO CLUB
Meetings: First Tuesday at the Shell Lake United Methodist Church, Reinhart Drive, Shell Lake, WI. Meeting time: 7 p.m. More information: <http://home.centurytel.net/NorthlandARC/>.

Stevens Point
CWRA Ltd./UWSP ARC Meetings second Wednesday. of each month at 7:30 pm. Science Building on the UW-Stevens Point Campus, Room A107, Stevens Point, WI. Email: jglas776@uwsp.edu. Webpage: www.qsl.net/wb9qfw.

Superior
ARROWHEAD AMATEUR RADIO CLUB, INC. Meetings: Second Tuesday at WITC Conference Center, 600 N. 21st St., Superior, WI. Time: 7:30 p.m. Board meetings held before regular meetings.

W.A.R. WISCONSIN ASSOCIATION OF REPEATERS
Quarterly meetings of the Wisconsin Association of Repeaters are held at various locations around the State on the second Saturdays of March, June, September and December. Check the WAR web page for meeting announcements and repeater coordination info. Information: <http://www.wi-repeaters.org>.

Watertown
WATERTOWN AMATEUR RADIO CLUB
Meetings: First Thursdays of month, 7 p.m., Watertown Public Library, 100 South Water Street.

Waupaca
WAUPACA AMATEUR RADIO CLUB CQ
First Tue. Social gathering and Dutch treat luncheon, King's Table, King, WI, on Highway QQ, just south of Highways 10 and 54, west side of Waupaca. Gather at 11 to 11:30. Order at noon. Club business transacted. CQ Third Fri. Social gathering and Dutch treat dinner. Semi-formal, OM and XYL, at one of the better supper clubs in the area. Check: Waupaca 147.39 nets at 8 a.m. or 8:50 p.m. for month's meeting location.

Wausau
WISCONSIN VALLEY RADIO ASSOCIATION Meetings: First Tuesdays, 7:30 p.m. Location varies. Information: 146.64 (-600). <http://home.dwave.net/~wvra/>.

West Allis
West Allis Radio Amateur Club Second Tuesday of each month at 7:30 p.m. St. Peter's Episcopal Church, 80th and Lincoln Ave., West

Allis. Meetings in basement. Entrance at rear, off alley. Handicapped accessible. www.warac.org.

West Bend
WASHINGTON COUNTY AMATEUR RADIO CLUB Meetings: Second Thursdays, 7:30 p.m., Washington County Courthouse. Net: Thursdays, 7:30 p.m., 146.73 (-600).

Wisconsin Rapids
WISCONSIN RAPIDS AMATEUR RADIO CLUB Meetings: Third Wednesdays, 7 p.m., Room 14 of Wood County Courthouse. Talkin: 146.79 (-600) for entry into the building.

WHAT EVER HAPPENED TO CHANNEL 1?

Thought some of our readers might find this of interest.

Ever wonder why your television dial starts with Channel 2? Find out why in this brief look at the early days of television and how it all began.

WHEN A TELEVISION RECEIVER IS PURCHASED in the United States, you can take it anywhere in the country, plug it in, pull up the “rabbit ears,” and tune in a station. That is possible because we have national broadcasting standards that are common throughout the country. Yet, one time commercial television was going to be introduced to the American public without standards. Fortunately, that “experiment” ended before it even started. But let’s not get ahead of the story!

UP TO 1937 During the first few months of 1933, the Radio Corporation of America (RCA) demonstrated the first successful all-electronic television system. Broadcasts were made from the RCA experimental television transmitter, W2XBS, located at the top of the Empire State Building in New York City. The characteristics of that early all-electronic television system were modest:

- Lines: 240
- Frames: 24 per second
- Scanning: Sequential (no interlacing)
- Bandwidth: 2 MHz
- Video carrier: AM modulated, full sideband
- Audio carrier: AM modulated, full sideband

Yet, the results were far better than any mechanical television system had ever accomplished. For those experiments, the video carrier was approximately 45 MHz.

It may be hard for us to appreciate fully what RCA had accomplished in 1933. But to give you an idea: Many of the experimental television broadcasts were still using frequencies in the 2 to 3 MHz range, and bandwidths of 100 kHz. In addition, the earlier systems were mechanical using gears, motors, mirrors, etc. As television advanced, each step pointed towards non-mechanical systems, and higher bandwidths and carrier frequencies.

The Federal Communications Commission (FCC) was established by an act of Congress on June 22, 1934. It was about that time that a portion of the VHF radio spectrum was allocated to television for the first time (see Table 1). Previously, any frequencies above 30 MHz was available to experimenters. Those experiments included a number of pioneering amateur radio operators; there were also experimental stations that included television. In 1934, the experimenters were moved to the frequencies above 100 MHz, while television was allocated to bands, 42-46 and 60-86 MHz. There were no channels associated with the allocations, but it was a beginning: television was making its first move.

1934-1938 Progress was slow for television during those years. The depression was at its worst, and even mighty RCA lost money. But advances were made in RCA’s all-electronic system. In June 1936, RCA announced the start of a massive field test. A total of 100 experimental-television receivers were distributed to RCA employees for placement in their homes and offices. RCA began regular television broadcasts from W2XBS, using their new Radio City television studios. Those studios were linked to the Empire State Building transmitter by an experimental 177 MHz radio link and a coaxial cable. The composition of the television signal used for that test was as follows:

- Lines: 343
- Frames: 30 per second
- Scanning: Interlaced (2:1)
- Bandwidth: 5.75 MHz
- Video carrier: AM modulated, full sideband
- Audio carrier: AM modulated, full sideband

On June 15, 1936, the FCC began informal hearings concerning the radio spectrum above 30 MHz. There was an increasing demand for those frequencies and a new word began to be heard at the FCC; that word was standards. The Radio Manufacturers Association (RMA), the trade association for the radio and television equipment manufacturers, had formed a sub-committee on television. It attended the June 1936 hearings because of its interest in the possible future commercialization of television. In addition to urging definite channel allocations, the RMA had a set of television standards to present. Although those standards were incomplete in some respects, one important recommendation that the RMA made to the FCC was that the bandwidth of a television channel should be 6 MHz -- the same bandwidth that is used today. The RMA television standards were:

- Lines: 441
- Frames: 30 per second
- Scanning: Sequential (no interlacing)
- Bandwidth: 6 MHz
- Video carrier: AM modulated, full sideband
- Audio carrier: AM modulated, full sideband

It is interesting to note that the proposed 441-line standard was beyond the capabilities of any system that had been demonstrated up to that point. It wasn’t until eight months later, on February 11, 1937; that a manufacturer (Philco) gave a convincing demonstration of a television system that completely met the RMA standards.

The FCC hearings that had started on June 15, 1936 resulted in the allocation of 19 television channels, each with a bandwidth of 6 MHz. The new allocations, which are shown in Table 1, became effective October 13, 1938. The RMA revised and completed its set of television standards, which were essential the same as the 1936 standards except for one important difference: the video carrier would not be transmitted with a full upper sideband and only a partial lower sideband. That vestigial sideband system was eventually adopted by the FCC and is used today.

Television now had allocations and channel numbers. Our mysterious Channel 1 was assigned to the 44 to 50 MHz band as shown in Table 1. RCA’s experimental station quickly received a permit for one of those new television allocations and selected Channel 1.

1938-1940 The television industry was generally pleased with the FCC allocation of 19 TV channels. They were hoping for a continuous band of frequencies to simplify tuner design, and were somewhat disappointed that 10 of the 19 channels were above 150 MHz. Those frequencies were virtually unused, and thought to be useful only for television relay networks. But the seven channels between 44 and 108 MHz were enough to begin plans for commercial television operation. By then it was believed that the FCC would adopt the RMA standards and commercialization could begin. But not everybody agreed with the RMA standards, and the FCC wasn’t about to approve any standard unless the television industry was in almost total agreement.

On October 20, 1938, just one week after the allocations because effective, RCA announced that regular television programming would begin as a “public service” on April 30, 1939. That date coincided with the opening of the 1939 New York World’s Fair. A number of manufacturers began producing television receivers, and by the opening of the fair they were in the stores and ready for sale. The opening ceremonies by RCA’s W2XBS, and featured the President of the United States. After that event, broadcasts were scheduled on a regular basis.

By the end of May 1939, large department stores, such as Macy’s in New York, offered as many as nine different models for sale, supplied by three manufacturers (Andrea, DuMont, and RCA). Screen sizes for those television sets ranged from 5 to 14 inches and prices ranged from \$189.50 to \$600.00. Most of the early sets were complete receivers, but one, the Model TT-5 from RCA had no audio section. If audio was desired, it had to be connected to a compatible RCA receiver. Unfortunately, sales of those early television sets were not very good, and by the end of 1939 fewer than 400 had been sold in the New York area.

All of the major television broadcasters (incidentally, the stations were still considered experimental) had adopted the RMA standards by the end of 1939. That included the stations in New York City, Chicago, Los Angeles, and Schenectady. The FCC was urged to adopt the RMA standards so that commercialization could begin. The FCC responded to the pressure from the television industry by publishing rules on December 22, 1939, for limited commercialization. It was a kind of Christmas present for the television industry.

Table 1				
Channel	1938-1940	1940-1946	1946-1948	1948-2003
1	44-50	50-56	44-50	
2	50-56	60-66	54-60	54-60
3	66-72	66-72	60-66	60-66
4	78-84	78-84	66-72	66-72
5	84-90	84-90	76-82	76-82
6	96-102	96-102	82-88	82-88
7	102-108	102-108	174-180	174-180
8	156-162	162-168	180-186	180-186
9	162-168	180-186	186-192	186-192
10	180-186	186-192	192-198	192-198
11	186-192	204-210	198-204	198-204
12	204-210	210-216	204-210	204-210
13	210-216	230-236	210-216	210-216
14	234-240	236-242		
15	240-246	258-264		
16	258-264	264-270		
17	264-270	282-288		
18	282-288	288-294		
19	288-294			

HOW THE TELEVISION ALLOCATIONS have changed over the years.
This table shows the frequency (in Megahertz) allocation of VHF channels

At the time those rules were published, the FCC also announced that hearings would be held in January, before establishing a date for limited commercialization. At those hearings, it was made clear to the FCC that many of the broadcasters did not agree that the RMA standards were the best. Philco urged the FCC to adopt their system of television with 605 lines and 24 frames-per-second.

DuMont wanted standards that included 625 lines and 15 frames-per-second. In addition, there was some vague talk about something-called color television. Nevertheless, in an order issued on February 29, 1940, the FCC rules that limited commercialization could begin on September 1st but warned that nothing should be done to encourage a large public investment in television receivers. It refused to adopt any standards, with the implication that each of the broadcasters could use whatever standards they liked best, with the public deciding who had the best system.

RCA responded to the authorization for limited commercialization with full-page newspaper ads in early March announcing the “arrival of television,” and ordered the immediate production of 25,000 television receivers. The FCC realized that limited commercialization wasn’t going to work, as the sale of thousands of television sets would, in effect, “freeze” the standards, making a change to other standards almost impossible. Within a few days of the RCA newspaper ads, the FCC’s permission for limited commercialization was withdrawn.

Television was also about to undergo some more changes. Major Edwin H. Armstrong had introduced his development of frequency modulation (FM), in 1935. Shortly after its introduction, five experimental frequencies between 42.6 and 43.4 MHz were allocated for FM. By 1940, the FCC had 150 applications for experimental FM stations on file that could not be processed because of lack of frequencies. As a result of hearings held on March 18, 1940, the FCC assigned FM a continuous band of frequencies (done to simplify tuner design), and expanded the FM allocation to include the frequencies from 42 to 50 MHz. The new allocation included the 44 to 50 MHz band that had previously been assigned to Channel 1.

But that is not what happened to Channel 1! The television channels were renumbered with Channel 1 now assigned to the 50-56 MHz band and the remaining channels were shifted around the spectrum. But when the smoke cleared, the television industry had lone one channel, leaving it with 18 allocations.

The new FM channels and the changes in the television allocations became effective on June 20, 1940. Commercial FM broadcasting was authorized to begin on January 1, 1941.

1940-1946
When the revised 18-channel television allocations went into effect, the television industry was unhappy, to say the least. The limited commercialization plan was suspended, the FCC continued its refusal to set television standards, and a television channel was lost to FM. Because of the changes in the allocations, many of the experimental television broadcasters had to go off the air to complete extensive transmitter changes. For example, the RCA experimental transmitter W2XBS, operating on the old Channel 1 (44-50 MHz) was forced to switch to the new Channel 1 (50-56 MHz) because of the changes.

However, soon after that things began to look up. A member of the RMA had met with the FCC to ask just what the television industry could do to win approval of a set of standards. The FCC replied that if the industry could agree on one set of standards, it would be approved without delay. Quickly, the RMA organized the National Television System Committee (NTSC). The NTSC was open to all major interests in the television field whether they were associated with the RMA or not. Eventually, over 160 individuals became associated with the NTSC. On July 31, 1940, under the RMA’s sponsorship and with the FCC’s blessing, the NTSC held its first meeting.

With the opportunity to propose a set of standards to the FCC, you might have expected that the NRSC would simply have endorsed the existing RMA standards, but that is not what happened. Every aspect of the television standards question was examined and discussed at length. On January 27, 1941, the NTSC met with the FCC and presented a progress report. The preliminary NTSC standard presented to the FCC at that meeting closely paralleled the RMA standards. That seemed to indicate that the RMA standards were essentially correct. There was one important difference, however. The audio carrier was to be FM. The FCC had one reservation about the proposed standard -- it felt that the 441-line standard recommended by the NTSC was too low. That standard went way back to the first RMA standards of 1936, when both video sidebands were transmitted. It was common knowledge that the vestigial sideband system in use since 1938 allowed a much higher line count and, accordingly, a better television picture. The NTSC agreed to re-examine that question and said that it would present more information at the hearings that were to be held in March 1941.

Those hearings were held on March 20, 1941. The NTSC standards that was presented at the hearing was almost identical to the one proposed earlier except that the number of lines was increased to 525 lines. (Although the selected number of scanning lines seemed to be arbitrary, it was not. The line count had to be an odd number and to be related to few multiples of odd numbers, such as 3x3x7x7 = 441 or 3x5x5x7=525, for example. That was necessary for generation of the synchronizing pulse.) The new standards was as follows:

- Lines: 525
- Frames: 30 per second
- Scanning: interlaced (2:1)
- Bandwidth: 6 MHz
- Video carrier: AM modulated, vestigial sideband
- Audio carrier: FM modulated, +/- 75 kHz deviation (later +/- 25 kHz deviation)

Virtually all of the participants in the hearings (they went on for four days) agreed that the NTSC Standards were correct and should be adopted quickly. The FCC was convinced that the industry had

finally agreed and the NTSC Standards were adopted as the national standard in April 1941. The effective date was July 1, 1941. Commercial television could finally begin!

When that “Opening Day” for commercial television finally arrived, only two television stations were licensed and ready for operation; WNBT (NBC, old W2XBS) transmitting on Channel 1 and WCBW (CBS, old W2SAS) transmitting on Channel 2. Both of these stations were in New York City. Soon after WPTZ in Philadelphia started transmitting September 1, 1941, using on Channel 3By the spring of 1942, a total of four commercial stations were in full operation and 10,000 television receivers had been sold.

World War II halted television’s growth, when the Defense Communications Board ordered construction of new radio and television stations to end. Television programming was reduced to just four hours per week for the broadcasters already in operation (all devoted to war-related activities).

As the end of the war approached, the FCC was faced with a monumental task. The war effort had brought about an extraordinary leap in communications technology. Frequencies that had been thought to be useless were now in tremendous demand. The entire spectrum had to be re-examined, with new allocations made and old ones revised. The FCC began holding hearings on September 28, 1944. It was promptly overwhelmed. The 18-channel television allocations in effect since 1940 were attacked by one group as being wasteful of the valuable VHF spectrum, yet another group urged in increase to 26 channels. Others urged the FCC to immediately move all television allocations to UHF frequencies. But the television industry argued that television had waited long enough and should develop now, using the existing allocations.

After hearings that were held on February 14, 1945, it became clear that no group was going to get everything it wanted. In the FCC’s final decision, released on June 27, 1945, television’s allocation was reduced to 13 channels and FM was moved from the 42-50 MHz slot to 88-106 MHz, later extended to 108 MHz. The television interests were very unhappy that they had been left with only 13 channels, but the FM interest suffered a major blow because all of the existing stations had to go off the air and switch to new frequencies. In addition, 500,000 home FM receivers were now obsolete.

The reduction to 13 television channels was accompanied by new and reorganized frequency allocations (see Table 1). Again broadcasters had to go off the air to switch frequencies.

Our Channel 1 was still around, but it was moved back to the 44-50 MHz band that it had occupied from 1938 to 1940. In addition, there was a restriction on assigning Channel 1: It could only be used as a community channel, and power limited to 1,000 watts. Other television channels were for metropolitan stations, with a maximum power of 50,000 watts permitted. All channels, except Channel 6, were shared with fixed and mobile services -- a fact that left the television interest concerned about interference. The changes became effective March 1, 1946.

1946-1948
Even with the reduced number of channels, the boom was on. Manufacturers quickly began producing television receivers, transmitters, antennas, etc. New television stations were built all over the United States. The FCC had identified the top 140 metropolitan cities and assigned each at least one channel; a total of 400 were to be allotted. The FCC received many more applications than it had available channels. In an effort to provide with as many channels as possible, the FCC routinely threw away the “safety factor” of mileage between licensed transmitters. Television receiver sales were doing very well, with 175,000 sold by the end of 1947. Manufacturers were selling television sets as fast as they could be made, even though they were rather expensive. (A typical set with a 10-inch screen sold for \$375.)

But problems began to appear. Propagation theories at that time predicted that television signals would not be received over the horizon -- but they were, quite readily. So, even with just 50 stations on the air, interference problems were beginning to appear. Meanwhile, the FCC had reduced the minimum distance between stations using the same channel to just 80 miles. An engineering study released by the FCC warned of interference problems if immediate action wasn’t taken. That lead to an FCC report issued on may 5, 1949, that rules that television could no longer share its frequencies with fixed and mobile services, and that the 72 to 76 MHz band could be used for fixed radio services only.

But where could the mobile services be located if they could no longer share the television allocations, and could no longer be used for use the 72 to 76 MHz band? There was only one place to go -- the television industry would have to give up another television channel. But which channel would that be? The American Radio Relay League (an association of amateur radio operators) urged that Channel 2 be deleted so that the second harmonics of the 28-29.7 MHz amateur radio band would not interfere with television reception. The television industry, although not pleased about loosing yet another television channel, agreed that 12 clear channels were preferable to 12 shared channels. If they had to loose a channel, they preferred that it be Channel 1, because its absence would have the least impact on commercial television.

The FCC went along with the television industry’s position, and on June 14, 1948, Channel 1 was deleted from the allocation plan. Channel 1’s frequencies were assigned to the land and mobile services. At the same time, the FCC decided not to renumber the channels -- that is what happened to Channel 1.

Based on a March 1982 issue of Radio Electronics Magazine.
Edited and expanded by J. W. Reiser, FCC International Bureau
Rev. 8-4-2000